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(57) Abstract Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.			

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SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

10 Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of
15 target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they
20 were transcribed.

Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect.
25 Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators
30 searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent
35 discloses a "signal sequence trap" which selectively identifies ESTs for secreted

proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

5 The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

In other embodiments, the present invention provides an isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

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NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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 10 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;

or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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 15 NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID
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 20 NO:1501, SEQ ID NO:1502, SEQ ID NO:1503, SEQ ID NO:1504, SEQ ID
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 NO:1513, SEQ ID NO:1514, SEQ ID NO:1515, SEQ ID NO:1516, SEQ ID
 NO:1517, SEQ ID NO:1518, and SEQ ID NO:1519;
 25 or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

DETAILED DESCRIPTION

30 The nucleotide sequences of the sESTs of the present invention are reported in the
 Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each
 SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

	1	BK8	32	62	DY307	93	DY611
5	2	BV216	DW1001	63	DY643	94	EC259
	3	BV274	33 DW831	64	DY656	95	DY711
	4	BV48	34 DW859	65	DY675	96	EC248
	5	DN351	35 DW875	66	DY988	97	EC32
	6	DN381	36 DW888	67	DY992	98	DO703
10	7	DN405	37 DW901	68	DY225	99	DO713
	8	DU651	38 DW902	69	DY236	100	DR294
	9	DU660	39 DW904	70	DY242	101	DY1
	10	DU675	40 DW905	71	DY254	102	DY10
	11	DU684	41 DW906	72	DY914	103	DY106
15	12	DD364	42 DW929	73	DY946	104	DY117
	13	DD379	43 DW981	74	DY955	105	DY148
	14	DD389	44 DX191	75	DY959	106	DY167
	15	DD401	45 DX219	76	DY961	107	DY17
	16	DD413	46 DX245	77	DY981	108	DY174
20	17	DD426	47 DX256	78	DY357	109	DY175
	18	DD428	48 DX267	79	DY358	110	DY178
	19	DN293	49 DX66	80	DY381	111	DY23
	20	DD454	50 DX81	81	DY413	112	DY27
	21	DD472	51 DY780	82	DY414	113	DY41
25	22	DD475	52 DY803	83	DY415	114	DY42
	23	DT306	53 DY809	84	DY431	115	DY8
	24	DW282	54 DY814	85	DY433	116	DY93
	25	DW300	55 DY261	86	DY436	117	EB107
	26	DW303	56 DY264	87	DY543	118	EB113
30	27	DW323	57 DY266	88	DY565	119	EB163
	28	DT258	58 DY271	89	DY585	120	EB25
	29	DW246	59 DY287	90	DY331	121	EB77
	30	DW324	60 DY297	91	DY586	122	EC172
	31	DW333	61 DY306	92	DY696	123	EC302

	124	EC317	158	EJ90	192	EJ224	226	EP378
	125	EC328	159	EM270	193	EJ240	227	EP38
	126	EC341	160	EM278	194	EJ254	228	EO109
	127	EC349	161	EN186	195	EJ258	229	EO120
5	128	ED105	162	EN215	196	EJ265	230	EQ166
	129	ED21	163	EN217	197	EJ280	231	EQ187
	130	ED23	164	EN234	198	EJ285	232	EQ188
	131	ED30	165	EN239	199	EJ307	233	EQ190
	132	ED43	166	EN256	200	EJ38	234	EQ194
10	133	ED54	167	EN260	201	DO235	235	EQ207
	134	EE177	168	EN264	202	DO238	236	EQ208
	135	EE65	169	EN266	203	DO263	237	EQ214
	136	DQ365	170	EN271	204	DO319	238	EQ215
	137	DK393	171	EN274	205	EJ324	239	EQ218
15	138	DK399	172	EN287	206	EN470	240	EQ219
	139	DO1128	173	EN310	207	EN477	241	EQ220
	140	DO1150	174	EN342	208	EN539	242	EQ221
	141	DZ34	175	EN363	209	EP451	243	EQ226
	142	DZ42	176	EN423	210	EO10	244	EQ229
20	143	EE116	177	EH106	211	EO14	245	EQ230
	144	EE93	178	EH145	212	EO48	246	EQ231
	145	DJ387	179	EH166	213	EO58	247	EQ233
	146	DJ402	180	EH167	214	EO60	248	EQ237
	147	DN551	181	EH178	215	EO62	249	EQ261
25	148	DN559	182	EH180	216	EO68	250	EQ272
	149	DN603	183	EH186	217	EO89	251	ER104
	150	DN629	184	EH188	218	EO90	252	ER106
	151	DN631	185	EH189	219	EO92	253	ER128
	152	DO11	186	EH190	220	EO97	254	ER134
30	153	DO118	187	EH203	221	EP108	255	ER174
	154	DO15	188	EH206	222	EP165	256	ER201
	155	DO157	189	EH95	223	EP219	257	ER77
	156	DO19	190	EJ148	224	EP234	258	ER80
	157	EJ53	191	EJ179	225	EP277	259	ER97

	260	ES136	294	ER399	328	FB264	362	FG208
	261	ES306	295	ER408	329	FB38	363	FG265
	262	ES35	296	ER418	330	FB71	364	FG274
	263	ES37	297	ER430	331	FB78	365	FG278
5	264	ES206	298	ER471	332	FC12	366	FG281
	265	ET13	299	ER476	333	FB349	367	FG291
	266	ET22	300	ER493	334	FC136	368	FG294
	267	ET39	301	ER496	335	FC170	369	FG340
	268	ET84	302	ER498	336	FD152	370	FG363
10	269	EF121	303	ER524	337	FE141	371	FG372
	270	EF129	304	EW13	338	FE5	372	FG380
	271	EF45	305	EX25	339	FD131	373	FG401
	272	EF48	306	EX53	340	EC425	374	FG99
	273	EF5	307	EY165	341	EC428	375	FI203
15	274	EF88	308	EY29	342	ED204	376	FE311
	275	EG194	309	EZ35	343	ED205	377	FE315
	276	EG251	310	EZ4	344	ED210	378	FE322
	277	EH12	311	EZ88	345	ED223	379	FE329
	278	EH213	312	EZ93	346	DI301	380	FE341
20	279	EH22	313	FA8	347	DI303	381	FE366
	280	EH221	314	EV234	348	DI310	382	FE375
	281	EH248	315	EW101	349	DI39	383	FE412
	282	EH29	316	EW109	350	DJ90	384	FE415
	283	EH61	317	EW150	351	DM290	385	FE442
25	284	EH68	318	EY197	352	DM304	386	FE472
	285	EH78	319	EY206	353	DN618	387	FE557
	286	EH80	320	EY215	354	DN896	388	FE568
	287	ER311	321	EZ209	355	DN904	389	FE619
	288	ER329	322	FA139	356	FG119	390	FE676
30	289	ER343	323	FA171	357	FG126	391	FE682
	290	ER366	324	FA252	358	FG140	392	FF150
	291	ER369	325	FA28	359	FG193	393	FF153
	292	ER381	326	FA316	360	FG197	394	FF168
	293	ER395	327	FA95	361	FG198	395	FF175

	396	FF181	430	FH17	464	FN203	498	FO201
	397	FF46	431	FH170	465	FN228	499	FO209
	398	FF49	432	FH24	466	FN229	500	FO211
	399	FF97	433	FH3	467	FN251	501	FO215
5	400	FG41	434	FH39	468	FN254	502	FO253
	401	FG437	435	FH56	469	FP134	503	FO254
	402	FG441	436	FH6	470	FP14	504	FO261
	403	FG448	437	FH66	471	FP163	505	FO267
	404	FG45	438	FM109	472	FP172	506	FO275
10	405	FG492	439	FM13	473	FP71	507	FO290
	406	FG504	440	FM15	474	FP87	508	FO292
	407	FG565	441	FM150	475	EI118	509	FO316
	408	FG567	442	FM170	476	EI16	510	FO324
	409	FG57	443	FM28	477	EI187	511	FO327
15	410	FG577	444	FM3	478	EI203	512	FO348
	411	FG615	445	FM32	479	EI228	513	FO36
	412	FG625	446	FM36	480	EI231	514	FO38
	413	FG630	447	FM60	481	EI236	515	FO40
	414	FG659	448	FM86	482	EI239	516	FO66
20	415	FG708	449	FM95	483	EI243	517	FO75
	416	FG91	450	FM98	484	EI250	518	FP185
	417	FG884	451	FM99	485	EI255	519	FP193
	418	FG891	452	FN172	486	EI264	520	FP233
	419	FG909	453	FN19	487	EI273	521	FP239
25	420	FG912	454	FN29	488	FO11	522	FP246
	421	FG949	455	FN53	489	FO125	523	FP262
	422	FG952	456	FK199	490	FO128	524	FP268
	423	FG965	457	FK217	491	FO133	525	FP271
	424	FH10	458	FK23	492	FO135	526	FP273
30	425	FH116	459	FK32	493	FO147	527	FQ505
	426	FH123	460	FK59	494	FO152	528	DN647
	427	FH13	461	FK78	495	FO160	529	DN650
	428	FH136	462	FN189	496	FO173	530	DN676
	429	FH149	463	FN191	497	FO182	531	DO94

	532	FR292	566	DN827	600	FY201	634	DU4
	533	FR436	567	DN833	601	FY202	635	DU75
	534	FR451	568	DN834	602	FY243	636	FY386
	535	FR473	569	DN850	603	FY265	637	FY388
5	536	FS10	570	DO913	604	FY316	638	FY398
	537	FS106	571	DO923	605	FY318	639	FY414
	538	FS107	572	DO935	606	FY321	640	GA48
	539	FS143	573	DO938	607	FY354	641	GA63
	540	FS173	574	DO944	608	FY356	642	GA64
10	541	FS28	575	DO949	609	FY421	643	DT382
	542	FS31	576	DO952	610	FY430	644	DT385
	543	FS40	577	DQ12	611	FY455	645	DT388
	544	FV35	578	DT2	612	FY484	646	DT464
	545	FV49	579	DT44	613	FY524	647	DT470
15	546	FV68	580	DT53	614	FY530	648	DT478
	547	FW13	581	DT8	615	FY628	649	DT482
	548	FW64	582	FQ661	616	DQ242	650	DU114
	549	FY127	583	FQ672	617	DQ262	651	DU118
	550	FY136	584	FQ696	618	DQ276	652	DU123
20	551	FY60	585	FR1087	619	DQ285	653	DU133
	552	FY65	586	FR927	620	DQ304	654	DU156
	553	FY72	587	FR938	621	DQ313	655	DU157
	554	DN1112	588	FR980	622	DQ51	656	FZ5
	555	DN1118	589	FV122	623	DQ54	657	FZ87
25	556	DN1122	590	FV131	624	DR628	658	DW181
	557	DN782	591	FV132	625	GU215	659	DW309
	558	DN793	592	FV84	626	FM481	660	DX1
	559	DN795	593	FV85	627	DT117	661	DX15
	560	DN806	594	FV95	628	DT133	662	DX19
30	561	DN809	595	FX115	629	DT139	663	DX22
	562	DN810	596	FX127	630	DT164	664	DX29
	563	DN814	597	FX154	631	DU160	665	DX3
	564	DN815	598	FY187	632	DU164	666	DX4
	565	DN823	599	FY199	633	DU166	667	FZ428

	668	FZ163	702	FZ209	736	GE89	770	GF151
	669	DY474	703	FZ254	737	DY516	771	GF179
	670	FZ139	704	FZ346	738	DY529	772	GF99
	671	FX76	705	GA82	739	DY530	773	GB261
5	672	FX65	706	GA85	740	DY538	774	GC499
	673	FX55	707	GA91	741	DY830	775	GD177
	674	DU536	708	DX299	742	DY857	776	GD7
	675	FZ534	709	DX304	743	EA17	777	GE300
	676	DU515	710	DX309	744	EA36	778	DX179
10	677	DU475	711	DX316	745	GG73	779	DY757
	678	DU462	712	DX328	746	DU544	780	EC392
	679	DU353	713	DX336	747	DU560	781	EE15
	680	DU341	714	DX354	748	DZ109	782	DU408
	681	DU306	715	DX357	749	EA105	783	DU410
15	682	DU278	716	DX359	750	EA106	784	DU416
	683	DU244	717	DX363	751	EA110	785	DU447
	684	DU238	718	DX364	752	EA123	786	DX111
	685	DU236	719	DY478	753	EA46	787	DX112
	686	DU231	720	DY497	754	EA58	788	DX123
20	687	FZ639	721	DY508	755	EA7	789	DX138
	688	GC456	722	EA89	756	EA82	790	DX146
	689	GG126	723	EA9	757	GE361	791	DX153
	690	GG129	724	EA90	758	FZ510	792	DX157
	691	GG152	725	GC52	759	GE387	793	EE4
25	692	GG170	726	GC57	760	GE410	794	FZ676
	693	GG182	727	GC585	761	GE463	795	FZ683
	694	GG217	728	GC74	762	GE466	796	GD309
	695	GG440	729	GE28	763	GE468	797	GD358
	696	GG619	730	GE41	764	GE471	798	GG543
30	697	DX279	731	GE51	765	GE524	799	FX516
	698	DX288	732	GE60	766	GE539	800	FX536
	699	DX290	733	GE68	767	GE548	801	FZ1032
	700	DX295	734	GE80	768	GE549	802	FZ1041
	701	DX298	735	GE82	769	GE99	803	FZ1072

	804	FZ781	838	DD12	872	GP304	906	EM40
	805	GA147	839	DD127	873	GP329	907	EM42
	806	GA284	840	DD177	874	GP338	908	EM58
	807	DY723	841	DD204	875	GP340	909	GF185
5	808	DY737	842	DD207	876	GQ13	910	GF187
	809	DY739	843	DD211	877	GQ18	911	GF196
	810	EC399	844	DD217	878	GQ22	912	GF197
	811	EM254	845	DD504	879	GQ38	913	GF207
	812	FX194	846	DD509	880	GQ40	914	GF209
10	813	FX234	847	DD518	881	GQ56	915	GF212
	814	FX281	848	DD537	882	GQ6	916	GF218
	815	FX317	849	DD541	883	DD312	917	GF221
	816	FX353	850	DD71	884	DD352	918	GF222
	817	FX395	851	DH941	885	EK145	919	GF250
15	818	GA293	852	DQ194	886	EK208	920	GF255
	819	GA321	853	DQ204	887	EK223	921	GF256
	820	GA327	854	DQ215	888	EK234	922	GI28
	821	GB160	855	DQ216	889	EK480	923	GI3
	822	GA132	856	EK423	890	EK491	924	GI30
20	823	GA135	857	EK424	891	EK499	925	GI51
	824	GA205	858	EK450	892	EK571	926	GI63
	825	GB814	859	EL15	893	EK578	927	GI7
	826	GF87	860	DD285	894	EK581	928	GI74
	827	GG687	861	EK598	895	EK591	929	GI88
25	828	GG692	862	EK622	896	DD215	930	GI9
	829	GG694	863	EK626	897	EK634	931	DY874
	830	GG702	864	EK649	898	EL358	932	DY886
	831	GG705	865	GO653	899	EL360	933	DY900
	832	GP23	866	GP107	900	EL387	934	EM358
30	833	GP56	867	GP123	901	EL391	935	EM381
	834	GP61	868	GP168	902	EM111	936	EM386
	835	GP65	869	GP232	903	EM112	937	EM388
	836	DD115	870	GP274	904	EM12	938	EM396
	837	DD119	871	GP297	905	EM125	939	EM397

	940	EM401	974	GT43	1008	HU212	1042	EY290
	941	EM406	975	GT6	1009	HU141	1043	EY304
	942	EM408	976	HR712	1010	HS555	1044	EY313
	943	EM409	977	HR704	1011	HR95	1045	FK295
5	944	EM423	978	HR693	1012	HR906	1046	FK301
	945	EM424	979	HR628	1013	HR76	1047	FK317
	946	FE196	980	HR605	1014	HR753	1048	FK328
	947	FE204	981	EK341	1015	HR731	1049	FK349
	948	FE205	982	EK390	1016	EN116	1050	FK350
10	949	FE207	983	EN108	1017	EM341	1051	FK354
	950	FE215	984	FK235	1018	FJ283	1052	FK365
	951	FE222	985	GK428	1019	FJ307	1053	FQ105
	952	FE227	986	GT56	1020	FJ70	1054	FQ239
	953	FE228	987	FQ562	1021	FM176	1055	FQ360
15	954	FE248	988	FQ605	1022	FM197	1056	FQ45
	955	FE263	989	FQ608	1023	FM205	1057	GU353
	956	FE271	990	FQ609	1024	FM208	1058	GX167
	957	GF296	991	FQ612	1025	FM229	1059	GX183
	958	GN38	992	FS49	1026	FQ419	1060	GX208
20	959	GN45	993	FS87	1027	GX48	1061	GX210
	960	GN60	994	GM101	1028	GX5	1062	FM369
	961	GN68	995	GM103	1029	GX92	1063	FM375
	962	GN82	996	GM114	1030	FM289	1064	FM389
	963	GR286	997	GM129	1031	FM290	1065	FM432
25	964	EN10	998	GM153	1032	FM296	1066	FM459
	965	EN37	999	GM158	1033	FM300	1067	FM462
	966	FK127	1000	GM196	1034	FM312	1068	FM479
	967	FK151	1001	GM243	1035	GU512	1069	GX301
	968	GS26	1002	GM259	1036	GU534	1070	GX336
30	969	GS4	1003	GM266	1037	GU608	1071	GX354
	970	EV391	1004	HV38	1038	GX159	1072	GX361
	971	FG535	1005	HV23	1039	GX97	1073	GX403
	972	FG852	1006	HV199	1040	EW304	1074	GX408
	973	GT28	1007	HV181	1041	EY281	1075	GX418

	1076	GU830	1110	GG3	1144	GN97	1178	HE91
	1077	GU925	1111	HA510	1145	HB443	1179	HF289
	1078	GU940	1112	HA422	1146	HC324	1180	HG444
	1079	GX1031	1113	HA382	1147	HC327	1181	HF137
5	1080	GX496	1114	HA360	1148	HC505	1182	HD706
	1081	GX504	1115	HA249	1149	HC724	1183	HG710
	1082	GX509	1116	HA199	1150	HA1054	1184	HG733
	1083	GX536	1117	HA192	1151	HB1041	1185	HG775
	1084	GX540	1118	GZ568	1152	HB746	1186	HI222
10	1085	GX645	1119	GY520	1153	HB752	1187	HI39
	1086	GX700	1120	GY515	1154	HB975	1188	HH215
	1087	GX730	1121	GY330	1155	HC705	1189	HH357
	1088	GX750	1122	GY307	1156	HA791	1190	HH372
	1089	GX753	1123	HA81	1157	HC1002	1191	HH378
15	1090	GX760	1124	HA73	1158	HC1071	1192	HH390
	1091	GX814	1125	HA29	1159	HC1089	1193	HH396
	1092	GX851	1126	HA24	1160	HC831	1194	HH404
	1093	GX909	1127	HA18	1161	HC986	1195	HH433
	1094	GY102	1128	GZ78	1162	GY72	1196	HI2
20	1095	GY105	1129	GZ70	1163	HG159	1197	HH544
	1096	GY138	1130	GZ7	1164	HG620	1198	HH608
	1097	GY211	1131	GZ496	1165	HD161	1199	HH612
	1098	GX1082	1132	GZ495	1166	HD353	1200	HH625
	1099	GX1108	1133	GZ485	1167	HD378	1201	HH640
25	1100	GX1140	1134	GZ436	1168	HD417	1202	HH648
	1101	GX1165	1135	GZ420	1169	HD427	1203	HH691
	1102	GX576	1136	GZ378	1170	HD434	1204	HJ120
	1103	GX595	1137	GZ37	1171	HD499	1205	HJ140
	1104	GX606	1138	GY558	1172	HD569	1206	HJ181
30	1105	GX619	1139	GG894	1173	HD627	1207	HJ184
	1106	GG874	1140	GG907	1174	HD648	1208	HJ22
	1107	GG858	1141	GN114	1175	HE111	1209	HJ253
	1108	GG836	1142	GN115	1176	HE142	1210	HJ265
	1109	GG8	1143	GN145	1177	HE178	1211	HJ362

	1212	HJ395	1246	HM372	1280	HO722	1314	HT166
	1213	HJ411	1247	HM380	1281	HO799	1315	HT176
	1214	HJ444	1248	HM422	1282	HO801	1316	HT193
	1215	HJ65	1249	HM444	1283	HO817	1317	HT43
5	1216	HJ674	1250	HM497	1284	HO82	1318	HT81
	1217	HJ705	1251	HM544	1285	HK719	1319	HW149
	1218	HJ81	1252	HM643	1286	HO1077	1320	HW152
	1219	HJ862	1253	HN72	1287	HO1080	1321	HW190
	1220	HJ949	1254	HN78	1288	HO1087	1322	HW204
10	1221	HK10	1255	HO107	1289	HO1143	1323	HW221
	1222	HK26	1256	HO237	1290	HO1176	1324	HW243
	1223	HK60	1257	HO266	1291	HO1183	1325	HW261
	1224	HJ1037	1258	HO277	1292	HO1216	1326	HW368
	1225	HJ968	1259	HO283	1293	HO1271	1327	HW74
15	1226	HJ981	1260	HO292	1294	HO1329	1328	HX10
	1227	HJ994	1261	HO294	1295	HO1434	1329	HX102
	1228	HJ995	1262	HO305	1296	HO1441	1330	HX110
	1229	HK189	1263	HO315	1297	HO1453	1331	HX113
	1230	HK234	1264	HO332	1298	HO854	1332	HX155
20	1231	HK650	1265	HO358	1299	HO868	1333	HX188
	1232	HK658	1266	HO476	1300	HP262	1334	HX29
	1233	HK669	1267	HO481	1301	HQ36	1335	HX50
	1234	HK713	1268	HO502	1302	HQ72	1336	HY13
	1235	HK899	1269	HO54	1303	GM16	1337	HY3
25	1236	HE187	1270	HO60	1304	GM286	1338	HY55
	1237	HK162	1271	HO600	1305	GM295	1339	HY57
	1238	HL25	1272	HO617	1306	GM335	1340	HZ15
	1239	HL380	1273	HO640	1307	GM365	1341	HZ8
	1240	HL73	1274	HO663	1308	HR397	1342	IA1
30	1241	HM50	1275	HO688	1309	HR560	1343	IA21
	1242	HM54	1276	HO692	1310	HR593	1344	IA32
	1243	HM91	1277	HO693	1311	HR598	1345	IA36
	1244	HM236	1278	HO703	1312	HT13	1346	IB2
	1245	HM280	1279	HO717	1313	HT137	1347	IC2

	1348	IC9	1382	IA167	1413	HW786	1447	IE362
	1349	HY229	1383	IA183	1414	HW810	1448	IH32
	1350	HY244	1384	IA188	1415	HW846	1449	II113
	1351	HY344	1385	IA200	1416	HW849	1450	IJ101
5	1352	HY370	1386	IA220	1417	IB15	1451	IJ163
	1353	HY374	1387	IA64	1418	IB19	1452	IJ167
	1354	HY404	1388	IA69	1419	IB22	1453	IF28
	1355	HY419	1389	IA86	1420	IB28	1454	IF376
	1356	HY435	1390	HW936	1421	IB36	1455	IF456
10	1357	HZ103	1391		1422	IB49	1456	IF87
	1358	HZ109	HW1017		1423	IC103	1457	IJ1201
	1359	HZ111	1392		1424	IC126	1458	IJ1220
	1360	HZ115	HW1044		1425	IC132	1459	IJ1237
	1361	HZ71	1393		1426	IC142	1460	IJ1240
15	1362	HZ76	HW1059		1427	IC155	1461	IJ1247
	1363	HZ88	1394	HW430	1428	IC54	1462	IJ1287
	1364	HW115	1395	HW432	1429	IC87	1463	IJ1292
	1365	HW128	1396	HW440	1430	IC92	1464	IJ1299
	1366	HW477	1397	HW456	1431	IE146	1465	IJ583
20	1367	HW483	1398	HW518	1432	IE147	1466	IJ592
	1368	HW491	1399	HW591	1433	IE149	1467	IJ597
	1369	HW499	1400	HW598	1434	IE169	1468	IJ629
	1370	HW507	1401	HW627	1435	IZ6	1469	IJ638
	1371	HZ116	1402	HW646	1436	JE33	1470	IJ640
25	1372	HZ162	1403	HW649	1437	JE44	1471	IJ642
	1373	HZ185	1404	HW693	1438	JE52	1472	IJ686
	1374	HZ201	1405	HW695	1439	IE10	1473	IG25
	1375	HZ224	1406	HW697	1440	IE47	1474	IG35
	1376	HZ262	1407	HW711	1441	IE73	1475	IH40
30	1377	IA106	1408	HW715	1442	JA37	1476	IH54
	1378	IA110	1409	HW730	1443	JA78	1477	IJ288
	1379	IA114	1410	HW732	1444	JB12	1478	IJ76
	1380	IA153	1411	HW741	1445	JB23	1479	IF292
	1381	IA157	1412	HW750	1446	IE352	1480	IF513

	1481	IF548	1515	IQ58
	1482	IJ1043	1516	IS488
	1483	IJ1048	1517	IS564
	1484	IJ1054	1518	IT23
5	1485	IJ1088	1519	IT44
	1486	IJ777		
	1487	IJ887		
	1488	IJ907		
	1489	IJ928		
10	1490	IJ942		
	1491	IL1		
	1492	IL100		
	1493	IL112		
	1494	IL28		
15	1495	IK11		
	1496	IK14		
	1497	IK20		
	1498	IK203		
	1499	IK209		
20	1500	IK212		
	1501	IK343		
	1502	IK73		
	1503	IO134		
	1504	IO138		
25	1505	IO151		
	1506	IO202		
	1507	IO209		
	1508	IO31		
	1509	IO356		
30	1510	IO420		
	1511	IO62		
	1512	IQ15		
	1513	IQ45		
	1514	IQ55		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, Bio/Technology 10, 773-778 (1992) and in R.S. McDowell, *et al.*, J. Amer. Chem. Soc. 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) ²	Hybridization Temperature and Buffer ¹	Wash Temperature and Buffer ¹
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T _D *; 1xSSC	T _D *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T _H *; 4xSSC	T _H *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T _J *; 4xSSC	T _J *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T _L *; 2xSSC	T _L *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T _R *; 4xSSC	T _R *; 4xSSC

‡: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

‡: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

*T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. The ~~isolated~~ polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* **19**, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* **185**, 537-566 (1990). As defined herein "operably linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

5 A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from *in vitro* culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

10 Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any
15 bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

20 The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art,
25 as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting
30 expressed protein may then be purified from such culture (i.e., from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligand. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

10 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

20 Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon γ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

30 Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.
- Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:
- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, Leishmania spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitus, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down-regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as , for example, B7)), *e.g.*, preventing
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this manner prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection
5 or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci
10 USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating
15 autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B
20 lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of
25 well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

30 Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnoli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad. Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al., *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994; Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

A protein of the present invention, which induces cartilage and/or bone growth in
10 circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone
15 formation induced by an osteogenic agent contributes to the repair of congenital, trauma induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or
5 progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural
10 cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized
15 neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from
20 chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

25 It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of
30 fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,
20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et
30 al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al. J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

- 10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

- A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.
- 25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

- Suitable assays for receptor-ligand activity include without limitation those
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborget et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

Tumor Inhibition Activity

20 In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

Other Activities

30 A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the
5 fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent
10 behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for
15 example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

20

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or complement its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides,
10 diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient,
20 administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

 In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a
25 mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either
30 simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous
5 administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an
10 adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain
15 physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

20 When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical
25 composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers,
30 antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem. Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systemically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1or2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	PeripheralBloodMononuclearCell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	SalivaryGland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	PeripheralBloodMononuclearCell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

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 - (C) CITY: Cambridge
 - (D) STATE: Massachusetts
 - (E) COUNTRY: U.S.A
 - (F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy Disk
 - (B) COMPUTER: IBM PC Compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
 - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Brown, Scott A.
 - (B) REGISTRATION NUMBER: 32,724
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (617) 498-8224
 - (B) TELEFAX: (617) 876-5851

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

GGAGATGTTG AGGTGGCTGC TGACCTTGGG TCTCATCTCC TTGATTTTCT TTATCTTCTT	60
CATTGCCGTC CTCTTAGGC TGTCTTGGC GAGGAGGGCC CCTGCGGAAT CGTGGTCTAT	120
ATCCCCGATA CATATTCTGC CTCACCTGGTC TACCTTGTTT TCCTGCACCC TGGTTGTCAG	180
CACCCTCCAT CACTTCTCCC TGCACAGGAG GGTGGAATA CTGTGGTCGA CGCCCATAGG	240

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GTCTCCGCAT GTAGTAAGGT GGGAACTTC GCCTGCGGTA GGGCCGCGT TGTGGGCCT 300
GGCCTTCGGG AGCACTCTCC GATCCCTCGT TCTTTTCCCC ACTCTCACTA TTCTGGTAAT 360
TTTGCTGGTA ATTGCGTGGA GGAGAACAGG TAGACTCGAG 400

```

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

```

GAATTAGTTG CCAGCACTTT AAAAATTGGT ATAGTTCACA TAAATATTCT GAATTCAGGC 60
TTTTGGAAAA GTTGTGGACC CAAGAATACT AGGCCCGCAT TTTCTTACGT CAACATTCTT 120
TCCAGGATGA TGAATGGACT GTTCTCTTTG GCCCCCTATC TCGAG 165

```

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

```

GAATTCTAGA CCTTCCTCTC CTACTCCCTT CCTTAGGCTC CTGAACCTGT TTGCTCCTAA 60
ATCTTGTTAA TTCTTTTCT CTGGATTTTG GTTCTTTTG GCITTCCTT GCCTTCCCCT 120
TTCTCTGTCT CCAACACTCT TTCCCATGT CTTCTGGCT GTCTCTATGT TCCTCTTCTC 180
TTATCCTCAA CTTTCTGTCC ATTCGGGCTT CCTCCCACC TCCCACGCC CAGCCCCTCC 240
CTCCTTGGTC TCCTTTTCGA TATGCCAAC CAATTTTGGG TCGAGTGCAT TCCCTCGAG 299

```

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

```

GCGATTGAAT TCTAGACCTG CCTGGATTGC CTTCTGTTGT GGTAGACAAA TCACCATTAA 60
ATGACTAAGT TTCCTGTTT TATGTGTTAA TGATCCTTAA TAACAAAAAG TTTTAAAGTC 120
TTAATTTCTG AAGATTATGT AAAGGTTAAG AAAGAAATTT TAAGTGAAAA TGATAAAACC 180
AAGCAAATGT TTATTAGTTC AATTGTTTTT CTTTTTATCT TGCAGCAACG CACATCTCGA 240
G 241

```

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GAATTCGGCC	TTCATGGCCT	AGGAAATGAC	TTTATTGTGG	TTGAATTAGT	TAAAGGGTAC	60
TTACATTACG	TGTTTGATTT	GGGAAATGGT	GCTAACCTCA	TCAAAGGAAG	CTCAAATAAA	120
CCTCTCAATG	ACAATCAGTG	GCACAACGTG	ATGATATCAA	GGGACACCAG	CAACCTCCAC	180
ACTGTAAAGA	TTGACACAAA	AATCACAACG	CAAATCACCG	CCGGAGCCAG	GAACCTTAGAC	240
CTCAAGAGTG	ACTTATATAT	AGGAGGAGTA	GCTAAAGAAA	CATACAAATC	CTTACCAAAA	300
CTTGATACATG	CAAAGAAGG	CTTCAAGGC	TGCCTGGCAT	CAGTTGATTT	AAATGGACGG	360
CTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GAATTCGGCC	TTCATGGCCT	ATAAAATTTA	AAAATGCTAA	GGATCTGGCC	CCACAGGCCC	60
CAAAGCTTTC	ACAGAGCTCC	TCTTAGACAT	GAAGATGCCC	ATTGGCCTCC	TAGGTCCCAG	120
GAGGTGTGGG	CAGGACTGCC	CTTCTCCGT	TCTCATTGCG	GGGCTCCTGA	AGGGGGTATC	180
TGAAAGTATG	TAAATCTGAT	GGGAGGTCTG	ATCCTCCTTT	TGCTAGCCCC	TGAACCTGTG	240
GGTGGAGTCT	GGCTGATGGC	CAGGGCCATG	TCCTAGAGGG	GACTCCCCTG	CAGGAGGCGG	300
GCTCTAAAGG	GAGTGGTGTC	CCTTTAGGCC	AGGGTTCACA	GTCCGGGTGG	TCTGGAGACT	360
GCAGGACTCA	GGGCCTGGGG	GTGGCATCAG	TCTGGCCAGG	CCCTGCGTCA	CTTGACCCCA	420
CTGTCTCGAG						430

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 391 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GGGTGGCTCA	TGCCTGTAAT	CCCGGCACCT	GGGTAGGCCA	GGGCAGCAGG	ATCGCTTGAG	60
CCCGGGAGTT	CGAGACAGCC	TGGGCAACAT	GGTGAGACCC	TGTCTCCATA	AAATTTTTTA	120
AAAAATTGCC	AGGTGTGGTC	GTGTGTGCCT	GTGAGGCTGA	GGTGGGAGGC	TCGCTTGAGC	180
CCAGGGGTCA	AGGCTGCAGT	GAGCCATGAC	TGCACGCCAC	TGCACCTCCAG	CGTGGGTGAC	240
AGAGTGAGAT	ACTGTATAAA	AAAAAAAAGC	TAAAACAAAA	CAAGAAGTAT	TATCTTAAGC	300
ATGTTATTTA	GAAATATGGA	GATAAATAAA	AATAACTGAA	AGTAGGTCGT	TGCTTCTGAG	360
GAGAGAAATT	GGGAGTTGGC	AAGGTCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```

GCTTTTGGAG CTGCTAAAAT GCCGGATTAC CTCGGTGCCG ATCAGCGGAA GACCAAAGAG      60
GATGAGAAGG ACGACAAGCC CATCCGAGCT CTGGATGAGG GGGATATTGC CTTGTTGAAA      120
ACTTATGGTC AGAGCACTTA CTCTAGGCAG ATCAAGCAAG TTGAAGATGA CATTCAAGCAA      180
CTTCTCAAGA AAATTAATGA GCTCACTGGT ATTAAAGAAT CTGACACTGG CCTGGCCCCA      240
CCAGCACTCT GGGATTTGGC TGCAGATAAG CAGACACTCC AGAGTGAACA GCCTTTACAG      300
GTTGCCAGGT GTACAAAGAT AATCAATGCT GATTCCGAGG ACCCACTCGA G              351

```

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```

GTGATGTGTC ACCCCAAGTG CTCCACGTGC TTGCCAGCCA CCTGCGGCTT GCCTGCTGAA      60
TATGCCACAC ACTTCACCGA GGCCTTCTGC CGTGACAAAA TGAAC TCCC AGGTCTCCAG      120
ACCAAGGAGC CCAGCAGCAG CTTGCACCTG GAAGGGTGGA TGAAGGTGCC CAGGAATAAC      180
AAACGAGGAC AGCAAGGCTG GGACAGGAAG TACATTGTCC TGGAGGGATC AAAAGTCCTC      240
ATTTATGACA ATGAAGCCAG AGAAGCTGGA CAGAGGCCCG TGAAGAATT TGAGCTGTGC      300
CTTCCCGACG GGGATGTATC TATTCATGGT GCCGTTGGTG CTTCCAAACT CGAG              354

```

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

```

GAATTCGGCC TTCATGGNCT AGGAGGAGGA AGAGGAGTAC GAGGATGACG AGGGAGGAGG      60
GGGAAGACGA GGAGGAGGAG GAGGCTGCGG CAGAGGCTGC CGCGGGGGCC AAACATGACG      120
ATGCCACACG CGAGATGCCT GATGACGCCA AGAAGTAAGG GGGGCAGAGA TGGATGAAGA      180
GAAAGCCACG GAAGAAAAAA GCCTGGTTTT GTTTTCCCA GAATATCGAT GGAATTAAAA      240
AGGCTCAGGT TTTTGACCAA AATACAATGT GAATTTATTC TGACATTCCT AAAATAGATT      300
AAATTAAAGC AATTAGATCC TGGCCAGCTC GATTCAAATT TGACTTTCAT TTTGAACATA      360
ATAAATATAT CAAAAGGTGT TAAAGAAAAC TGAATTAAAC CCAAAATTAT GTTTTCATGG      420
TCTCTCCTCG AG              432

```

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

```

CTATTTTACA TGCCCACCAG CATTGTATGG GGCTTCTCAC TTGTCCACAT GCTTGCCCTGT      60
GTCATATTTG ACTTAAAGCT TATTTTGACG GGAAACCAAT TTGTCCTTTT TTTGGAAAGG      120
GATGGCACCA CAGATGTGAC GCGGACAATG CATTTTGGGA CCCCTACAGC CTACGAGAAG      180
GAATGCTTCA CATATGTCCT CAAGGGCCAC ATAGCTGTGA GTGCAGCCGT TTTCCCGACT      240
GGAACCAAAG GTCACCTTCT TGACTCCTTT GCCCGTTCAG CTTTATGGGA TTCAGGCCTA      300
GATTACTTGC ACGGGACTGG ACATGGTGTT GGGTCTTTT TGAATGTCCA TGAAGGTCCT      360
TGCGGCATCA GTTACAAA.C ATTCTCTGAT GAGCCCTTGG AGGCAGGCAT GATTGTCACT      420
GATGAGCCCG GGTACTATGA AGATGGGGCT TTTGGAATTC GCATTGAGAA TGTTGTCCTT      480
GTGGTTCCTG TGAAGACCAA GTATAATTTT AATAACCGGG GAAGCCTGAC CTTTGAACCT      540
CTAACATTGG TTCCAATTCA GACCAAAATG ATAGATGTGG ATTCTCTTAC AGACAAAGAG      600
TGCGACTGGC TCAACAATTA CCACCTGACC TGCAGGGATG TGATTGGGAA GGAATTGCAG      660
AAACAGGGCC GCCAGGAAGC TCTCGAG      687

```

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

```

GAATTCGGCC TTCATGGCCT AGTCGGTGGG TGCCTGTAGT CCCAGCTACT TGGGAGGCTG      60
AGGGAGGAGA ACTGCTTGAA CCCGGGAGGC AGAGGTTGCA GTGAGCCGAG ATTGTGCCAC      120
TGTAATCCAG CCTGGGCCAC AAAGCAAGAA TCTGTCTCAA AAAAAAAAAA AAGAAAAGAA      180
AAGAATAAAT TTCTTTTCCC CTTGAAGAAG TTGATTTAGG CACAGACTCT GGACTCTGGA      240
TTTCCACAA TGTCTTATCT AGTCAACTCA AGTATCTGGA CTACAATTTT CTTGAAAGCA      300
AAGCCCATAT ATTAATAATC TTTACTTGTA TATAAATATT CAATAAATCA TTAAGTAAAT      360
GTGTAGAAGA ATTTTATGCT CAATAAGATC CACCCGATCA TGCATTTGAA AATTCTCGAG      420

```

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

```

GAATTCGGCC TTCATGGCCT AGCACATACT CTGCTTTTCT GTCAACATCC CATTTTGGGG      60
AAAGGAAAAG TCATATTTAT TCCTGCACCC CAGTTTTTAA ACTTGTTCTC CCAGTTGTCC      120
CCCTCTTCTC TGGGTGTAAG AAGGGAAATT GGAAAAAATA TTATATATAT ATTCTCCTTT      180
TAATGGTGGG GGGCTACTGG AGAGGAGAGA CAGCAAGTCC ACCCTAACTT GTTACACAGC      240

```

ACATACCACA GGTTCCTGGAA TTCTCATCTT CGAACCTAGA GAAATAGGTG CTATAAACAG 300
 GGAATTAAGC AAAATGCTGG ATGCTATAGA TCTTTTAATT GTCTTAATTT TTTTCTATT 360
 ATTAACAAC AGGCTCGAG 379

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

GTTCATGGCC TACGGAAAGT CAGCATGGAT AACAGACTGA TGGAACTCTT TCCTGCCAAT 60
 AAGCAAAGTG TTGAACACTT CACAAAATAT TTTACTGAGG CAGGCTTGAA AGAGCTTTCA 120
 GAATATGTTT GGAATCAGCA AACCATCGGA GCTCGTAAGG AGCTCCAGAA AGAACTTCAA 180
 GAACAGATGT CCCGTGGTGA TCCATTAAAG GATATAATTT TATATGTCTA GGAGGAGATG 240
 AAAAAAACA ACATCCCAGA GCCAGTTGTC ATCGGAATAG TCTGGTCAAG TGTAATGAGC 300
 ACTGTGGAAT GGAACAAAAA AGAGGAGCTT GTAGCAGAGC AAGCCATCAA GCACTTGAAG 360
 CAATACAGCC CTCTACTTGC TGCCTTTACT ACTCAAGGTC AGTCTGAGCT GACTCTGTTA 420
 CTGAAGATTC AGGAGTATTG CTATGACAAC ATTCATTTC TGAAGCCTT CCAGAAAATA 480
 GTGGTGCTTT TTTATAAAGC TGAAGTCCTG AGCGAGGATG CCCTCGAG 528

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

GAATTCGGCC TTCATGGCCT AGCCAGGCC ACGCTACACT CTGCCCACAC TGGTGAGCAG 60
 GAGGTCTTCC CAGCCCTGT CATTAGGCTG CATTACTCT TGCTAAATAA AAGTGGGAGT 120
 GGGGCGTGCG CGTTATCCAT GTATTGCCTT TCAGCTCTAG ATCCCCCTCC CCTGCCTGCT 180
 CTGCAGTCGT GGGTGGGGCC CGTGGCCCGT TTCTCCTTGG TAGCGTGCAC GGTGTTGAAC 240
 TGGGACACTG GGGAGAAAGG GGCTTTTCATG TCGTTTCCTT CCTGCTCCTG CTGCACAGCT 300
 GCCAGGAGTG CTCTGCCTGG AGTCTGCAGA CCTCAGAGAG GTCCCAGCAC TGGCTGTGGC 360
 CTTTCAGGTG TAGGCAGGTG GGCTCTGCTT CCCGATTCCC TGTGAGCGCC CACCCTCTCG 420
 AAAGAATTTT CTGCTTGCCC TGTGACTGTG CAGACTCTGG CTCGAG 466

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

```

GAATTCGGCC TTCATGGCCT AGCGTGATCC TGGAACGTGC TCTAGTTCGA GAGAGTGAGG      60
GCTTTGAGGA GCATGTACCA TCTGATAACT CTGGAAGATA CAGAGAGAAA TCCATCTTTT      120
CCCAGGTCTC CTTCACTGAA AACAAAAATC TACTTACATA CACTGTCACC TTAGCATCAG      180
AGTCGGATTA ATGAACTGCG GAACAAGAGG TTGTGAGAAT CTAAGATGGA ACCTTTCTTT      240
CTTCTTTCT TTTTITTTAA ATTTGTATT TTCCATCCAA CACTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

```

GAATTCGGCC TTCATGGCCT AGGGCTCTGC TTATAAACTT CAAAGTTACA CTGAAGGATA      60
CGGTA AAAAC ACCAGTTTAG TAACCATT TT TATGATTTGG AATACCATGA TGGGAACATC      120
TATACTAAGC ATTCCTTGGG GCATAAAACA GGCTGGATTT ACTACTGGAA TGTGTGTCAT      180
CATACTGATG GGCCTTTTAA CACTTTATTG CTGCTACAGA GTAGTGAAAT CACGGACTAT      240
GATGTTTTCA TTGGATACCA CTACCTGGGA ATATCCAGAT GTCTGCAGAC ATTATTTTCGG      300
CTCCTTTGGG CAGTGGTCGA GTCTCCTCTT CTCCTTGGTG TCTCTCATTG GAGCAATGAT      360
AGTTTATGG GTGCTTATGT CAAATTTTCT TTTTAATACT GGAAAGTTTA TTTTAAATTT      420
TATTCATCAC ATTAATGACA CAGACACTAT ACTGAGTACC AATAATAGCA ACCCTGGTCT      480
CGAG      484

```

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

```

GAATTGGCCT TCATGGCCTA GGAGATATAC CTAATGCTAG ATGATGAGTT AGTGGGTGCA      60
GCGCACCAGC GTGGCACATG TATACATATG TAACTAACCT GCACAATGTG CACATGTACC      120
CTAAAACTTA AAGTATATAT AAAAAAAAAA GACNTCGCTA GTGAGCACGC TGTATACGAC      180
ATCGCTAATG AGGACACCAT ACAAGGCATC GCTAACGATG ACGCTGTACA CAACATCACT      240
AATGATGACA CCGTATAAGA CATCGCTAAT TATGACGCTG TATACGACAT CGCTAATGAC      300
ACCGTACGAG GCACGCTAAC AAGGATGCTG TACACAACAT CGCTAATGAG GACAGTGATC      360
AAGCCATCGC TAATGAGGAC ACTGTATATG ACATTGCTAA CGAGGACACT GTACAAGGCA      420
TTGCTAACGA GGACGCTGTA CACAACATCG CTAATGACAC CATATAAGAC ATCACCAATG      480
AGGATGCTGT ATATGACATC GCTAATAACA CCGCTCGAG      519

```

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GCAGCTCTCA TCCTCGTCTC CCCAACACCA TAAGTCTCTC ATCCCGCCTC CAACCCACAC	60
CAGGCCGAAG CCCTCAGAGA GTGTTTTCAT CAGGAACCAC TCTCGAACCT GAAGGTTGAC	120
TTTAGCGTTT AGCAACCCAG GCGGTGTGT GTGTTTCCCG TTTTGTTC TGAGTGGTAG	180
CAGTGATCAC CGTAATTCCA TGTAGCCATG TGCTAGCAGA ACCCTGTGT CCTCACCGTG	240
GCCCGTGTGA CCCAGCCGA CGAGTGCCG GCGGAGTCCC CGTGCCTTC CCATGGTCCA	300
GTGAGCTGCC AGGGCATCAC ATGACTCTCA GCTGGGCTCG AG	342

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

GAATTCGGCC TTCATGGCCT AGAGCAGCTC TGAGGTAGAA ATTACAACGA TGAAAAGAGC	60
ACAACGTACA AAACCAAGAA AGAGTCTGTT GTGTGAAGGG TCATTGATG AAGAAGCTTC	120
TGCACAGTCC TTCAGGAAG TGTAAAGTCA ATGGAGAACC GGAAATCATG ATGACAACAA	180
GAAACAGAAT TTACATGCAG CAGTAAAAGA CTCATTGGAA GAATGCGAAG TACAGACTAA	240
TCTGAAAATT TGGAGAGAAC CACTTAATAT TGAACCTAAA GAAGACATTC TATCCTATAT	300
GGAAAAATTA TGGCTTAAAA AACACAGGAG AACTCCACAA GAGCAACTTT TTAATGCT	360
ACCAGATACG TTCCACATC CACATGAAAC CACTGGTGAT GCACAGTGT CTCAAATGA	420
AAACGATGAA GATAGTGATG GTGAGGAGAC CAAAGTACAA CACACAGCTC TTTTATTGCC	480
AGTAGAACA TTAACATAG AGAGACCTGA ACCATCTCTA AAGATAGTCG AACTGGATGA	540
TACTTATGAA GAGGAATTTG AAGAAGCAGA ACATCTCGAG	580

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

GAATTCGGCC TTCATGGCCT AGAAAGATCT AATTATCATG GACCTGCAC AGTTTCTTAT	60
GTGCCTGTCC CTGTGCACAG CCTTTGCCCT GAGCAAACCC ACAGAAAAGA AGGACCGTGT	120
ACATCATGAG CCTCAGCTCA GTGACAAGGT TCACAATGAT GCTCAGAGTT TTGATTATGA	180
CCATGATGCC TTCTTGGGTG CTGAAGAAGC AAAGACCTTT GATCAGTTGA CACCAGAAGA	240
GAGCAAGGAA AGGTTTGAA AGATTGTAAG TAAATAGAT GGCGACAAGG ATCGGCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

```

GAATTCGGCC TTCATGGCCT AAAAAAAGGA TGGTGTGTTG AGACCAGAAG CAGCAGCAGT    60
CCTCGACATC AACTACAACT TTCCTTCGCA CAGTGCATAC CCTCTGATAT ACTGAACCCA    120
ACGCCTATCC TCCAGCCCCC TAAGAACTAG AGAGGGAGCC TCACAACATT CCAATTTAAT    180
CCTTCAGAAA ATTCATTACT CTTCAAAGTT GTCTGTGGTT TTGTGACAAC GATATGACTA    240
GGTGCAAAAT GGCTTGCAAC TAATTAACAA ACATAGAAGC ATCCAACAAA CATATACGTG    300
CACAACTGTA GGATTAGGG ATGAAGCTCG AG                                     332

```

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

```

GAATTCGGCC TTCATGGCCT ACCAGCCTGG GCGACAGAGC AAGACTCAGT CTCAAAACAA    60
AACAAAACAA AACAAAAGA GAAGGCTATT ATTAACATTC GAGATAATGT GCCAGACTGC    120
TTCCATGTAT TTTCAATTATT CTGTCCCAA TCTGGTGAAG TGGGTATCTG CACAGCTTTC    180
TCTAGATTGA ACAACTAGTA AGGGGGCTGG CCCTGGAGAA AGTTACCTCC TGCTCGAG    239

```

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```

GAATTCGGCC TTCATGGCCT ACTTTTATAT TGTTATTTTT GTAAAGCATC TTTTCTTCAA    60
TTCTGTGTTG CATTCTGGGC CAAAATATTT CAGGTTGGTT CGGTGTGGAG TTAAGAAAAG    120
CAGGCGTTTT AGTGGAGAAA TGGGGAACAG CATCAAGAAA GGCTTTTTTC CTTTTTCTT    180
TTTTTTTGG AGACAGAGTC TTGCCCTGTC ACCCAGGCTG GAGTGCAATG GTCTCGAG    238

```

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```

GAATTCGGCC TTCATGGCCT AGATGGATTT CTTAATTGAA GTACTTTTAT AATCACAGTG    60

```

ACTGAACAAA ATATTTTCAA AGACATTTGT CATTCCTTAA AGCCAAGATT TTAAAGACTA 120
 ATGTCCTTCC TGAGGGTTAC TTTACTATAC TGTGTATGGT GTATAGCCAC AGAAAGTCAG 180
 TCTGATAAAT TTTCAATGTG TAAGTGTGAT GCATTCAACC CAGATCTCGA G 231

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

GAATTCGGCC TTCATGGCCT ACACAGAGTA TATTTATAGC TATCTCAGGG TCCTTGTCCTA 60
 ATTGTCTGTG TCATTTCTTC ATCTGCTTCT ACTGATTTT TCTGCTTCTG TTTACTCTTC 120
 ATTTTGGACC TATTTTCCCT TATTTGGTGC TTGCATACA ATTGTTGGG ACTGGATCTT 180
 TGCTAGTCCT TAAATGTTT TTAAGCTTTG TTTTGGGATG CAGTTAGGTG ACTCAGAAAC 240
 AATCAGAAAC AATTTGATCC TTTTATGTCT CTTAAGCTTT GTTATAGGCA GGACCAGAGC 300
 TCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:27:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

GAATTCGGCC TTCATGGCCT ACAATAATAG CCTCCACCT GGTCTTCCTT CTTAGTCTC 60
 TTCAGTCTTT CCCAAGCTC TTGAATCCTA CATGAACCCA TGCCTCGGTC AAAATATTAC 120
 AGGCTGCAGC CAATCTTCAA GTGGCATAA GGCCAAACAT CCATTTATAA TATGGTTGGA 180
 ATTCCTAACA CATTTTATCA TAGATCTAAT GCCATACAAT AGGTGGAGGT TAGATCCTCA 240
 CGCAACTCTC GAG 253

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

GAATTCGGCC TTCATGGCCT ACAGAGAAGT TGTGTTCCGG TTTATTGAAG TTCAGACACT 60
 TCTCCTCGCT CCATTCTGTC CACATTGTG TGAGCACATC TGGACACTCC TGGGAAAGCC 120
 TGAATCAATT ATGAATGCTT CATGGCCTGT GGCAGGTCCT GTTAATGAAG TTTTAATACA 180
 CTCCTCACAG TATCTTATGG AAGTAACACA TGACCTTAGA CTACGACTCA AGAACTATAT 240
 GATGCCAGCT CGAG 254

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

GAATTCGGCC TTCATGGCCT ACGAGAAGGA GTGGAAGAGT AAGCAGACTA GGAAAATACA	60
GTACAACCAT CAGGCAGCAT TACAGACCCA CTTAAGGTTT GTGGCCATGT GTGGTTGTGT	120
GGTTTTTTTT CTGGCCATGC TCAGTTACAT AGGGGCAAGT GCAAAAAAAA CCCCAGAGTT	180
TGTTTAACT AGAGCTCTGG TTTTGCCAAA C	211

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

GAATTCGGCC TTCATGGCCT AGGATCAGGT TCGTCCTTTA GTGTTGTGTA TGGTTATCAT	60
TTGTTTGGAG GTTAGTTTGA TTAGTCATTG TTGGGTGGTG ATTAGTCGGT TGGTTGATGAG	120
ATATTTGGAG GTGGGGATCA ATATAGGGGG AAATAGAATG ATCAGTACTG CGGCGGGTAG	180
GCCTAGGATT GTGGGGGCAA TGAATGAAGC GAACAGATTT TCGTTCATTT TGGTTCTCAG	240
GGTTTGTAT AATTTTTTAT TTTATGGGC TTTGGTGAGG GAAGTAGGTG GTGGAGCACA	300
GGCACTGCAG GTCAATGGAG GTGGAGTACA GGGACTACAG GTCAATGGAG GTGGAGCACA	360
GGGACTAAAG GTCAATGGAG GTGGGGCACA GGGACTACAC GTCAGTGGAG GTGGAGTCAC	420
AGGGACTACA GGTCACTGGA GGTGGAGCAC AGAGACTACA GGTCACTGGA GGTGGGGCAC	480
AGAGACTACA GGTCACTGGA GGTGGAGCAC AGAGACCACA G	521

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

GAATTCGGCC TTCATGGCCT AAAATTTCCT CTAAGTACTG ATTTAGCTGC ATTGTATAAG	60
TATATGCTTC CATTTTCATT CATTTCAAA TATTTCTAA TTTCCTTTC AATTTTTTTT	120
TCAGGAATTC GGGCCTTGCT GTGTTGCCA GGCTGGAGAG CAGTGCCACT ATCAGAGCTC	180
ACTATAAACT CAACTCCTG GGCTCAAGCA ACCCTCCAC CTCCCAACTC CCTCGAC	238

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

```
GGTTTCTTAA AAAAAAAAAA AAAAGGAATT TGATCCAGAG CAATTTTCT CAATTAAAT      60
TTGTGATTAC ATTTCTGAGT TTCCATGGCA GAGTTGTGAG TGGGGCTGTG ATATAATTTA      120
ACTTCTCCTA AATTGCTGAC ACCGATAACC CTATAAATTA ACAGATGGCG GAGGGAAATC      180
TCCTGGCTTC TTCCTGGCTA GTTTTTTTTA ATGGTCTGAT TTTTGTAATA GGGGTTTTGA      240
GTCCCAGCCG ACTCGAG                                     257
```

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

```
GAATTCGGCC TTCATGGCCT AAAGACTTAC GTTATATTTT CATATACTCC TTCCCACTCT      60
TAGTGTGTG TCAATATACA TTTTGTTTTA CATGTAAAAA CACCACAGTA TATTGTTCTT      120
AATTTTGCTT TTAATAGTAA ACTGTCTTAT AACAAATTAT GAAAATGGAA AAAACATGT      180
CTTTCTTATT TGCCCTCATA TTTATCCATT TAGGCACTCT TCCTTTTCC CTTTCATTCC      240
AGGTTCTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

```
GAATTCGGCC TTCATGGCCT ACTAACATTT ATGAAAATTA TTTGTAAATA AAATAAGAGG      60
CATTGAGATT AAAATTGGAG ATAAAGTTGC TGATGTGTTG TTTTCCTGAA GTATTTTTTT      120
TCCTAATTCT GATCTTTGTT TCCAATACA ATCACACTCA CACCCTTGCA GTTCAGTTTC      180
CTGACGACTC TCTAGTGTGC CAGATCTGTG TTTCTATGTC AGTGATCTGT TCCCCATCTC      240
TCGAG                                     245
```

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```
GAATTCGCTT CATGGCCTAC CGAGAAATGG GTGTGATTGC TGCCATGAGA GATGGTTTTG      60
GTTTCATCAA GTGTGTGGAT CGTGATGTTT GTATGTTCTT CCACTTCAGT GAAATTCCTGG      120
ATGGGAACCA GCTCCATATT GCAGATGAAG TAGAGTTTAC TGTGGTTCCT GATATGCTCT      180
CTGCTCAAAG AAATCATGCT ATTAGGATTA AAAAATTCC CAAGGGCACG GTTTCATTTC      240
ATTCCCATTC AGATCACCGT TTCTGGGCA CGGTAGAAAA AGAAGCCACT TTTTCCAATC      300
CTAAAACCAC TAGCCCAAT AAAGGCAAAG AGAAGGAGGC TGAGGATGGC ATTATTGCTT      360
ATGATGACTG TGGGGGTCTC GAG                                             383
```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

```
GAATTCGGCC TTCATGGCCT ACTGCCGCTC CTGGTGCTGC TTGTGTGCTC GTTGGTGCG      60
GACCTGGTAC CTCTTTGTG AAGCGGCAGC TGAGGAGACT CCGGCGCTCG CCATGGCCGA      120
CGAAAAGCTC GAG                                             133
```

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

```
GAATTCGGCC TTCATGGCCT AAGGTAGTCT AGGCTCATCT TCATGAGGGA ACTGAGGTCT      60
TGGGGGGTGG GGGTTACCCA AATAGTTTCA CAGAAGAACC AGAAATAAAA CCTGCCTTTC      120
TAGACTGTAA GTCTTGTGAT TGTCATCTAA ATGGTTGTCT CTATACAGCA ACTCATCTCT      180
AGAACTGAAA ATAAGTTTAA ATCCCTCTC CATCCCAAT AATTCAAGCT GCATTTCAGA      240
GAAAACCAGG ACTTTGGAAT CAGACAGCAA CTCGAG                                             276
```

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

```

GAATTTGTGC TCTTAGAGTA GGAGTTGGAA CTATAGGACT TGAAGGCAAG AGCAGGTATC      60
TTATCAAGGA TCTACTCACT CAGTTTCCTT AAAGCTCTCT CTCCAGATCG GATTCAACCG      120
CACATCATGA CAGATGTTCC GGCTACATTT ACCCAGGCTG AGTGTAAATGG GGATAAACCA      180
CCTGAAAACG GTCAACAAAC AATCACTAAA ATCAGTGAGG AATTGACTGA TGTGGACAGC      240
CCCCTGCCAC ACTACAGGGT AGAACCAGT CTGGAAGGTG CACTACCAA AGGAAGTCAG      300
GAGGAAAGAA GAAAATTACA AGGGAACAGA CTCGAG                                336

```

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```

GAATTCGGCC TTCATGGCCT AGTCGGAGAA GGACATCCAG GATCTGAAGT TTGGGGTCGA      60
GCAGGATGTT GATATGGTGT TTGCGTCATT CATCCGCAAG GCATCTGATG TCCATGAAGT      120
TAGGAAGGTC CTGGGAGAGA AGGGAAGAA CATCAAGATT ATCAGCAAAA TCGAGAATCA      180
TGAGGGGGTT CGGAGGTTTG ATGAAATCCT GGAGGCCAGT GATGGGATCA TGGTGGCTCG      240
TGGTGATCTA GGCATTGAGA TTCCTGCAGA GAAGGTCTTC CTTGCTCAGA AGATGATGAT      300
TGGACGGTGC AACCGAGCTG GGAAGCCTGT CATCTGTGCT ACTCAGATGC TGGAGAGCAT      360
GATCAAGAAG CCCC GCCCA CTCGA                                385

```

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```

GAATTCGGCC TTGCTAAAAA AAAAAAAAAA GAGGCAAGTA ATGTAATATC CCCACCTTT      60
GGTTTTCTTA TCTATAAATA CTGATTAAAA AAAAAAGTAC ACTGTCTGCC TTATAAGCTA      120
AAATGAGTGA ATACAGGCAA AATGCCTTAC ATTTTACTTT ACATTTACTA AGCACCAGCA      180
AAATGTAAAC TATGATGACA ATTATGATGA TGATGATATT GATATTTTCA AGGAGGGCGC      240
TCGAG                                245

```

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```

GAATTCGGCC TTCATGGCCT AAATAAGAT GATTTTGTG CTTAGCAGTT TAAGGTATAT      60
GGCTGCATAT GCAAACTCT TTCCAATTC AGTCGCTACT TTTACTTCTG CCCTTCTAT      120

```

CCATCGTCTT CATTGTGTGT GTACAGTGCT GTGTGTAAGC TTATCAGTGT GTTTTTTTAT 180
 TTGTATCAGT CATGAAAGTC CTGTTAGGTA TCCAGAGTTC TATTTATCTA GCTGTACAGA 240
 TCTCGAG 247

(2) INFORMATION FOR SEQ ID NO:42:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 106 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GGATATGGTA ACTGAGAACC ATTTTCTAGT TGAGATAACT CATGTACAGG GGGGGTCACA 60
 TGA CTCAACA ACACACAGAG CACAGAAGAG AACCAACAAT CTCGAG 106

(2) INFORMATION FOR SEQ ID NO:43:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 237 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GGGTATTTCC AAGTGATGT ATTTCTAAAG ATAGATTTTT TAAAAACAAA AAATCTTAAT 60
 TTAGATGATA AGCGATTTTT ACCTTTTTTT TTTTTCAAA GCAACTTGAT CCTGTAAGTT 120
 TTGGCATCTT AAGTGAAAT GTTCATGCAG TTTTGCTGGA TCTTCGCTAT GGCAGTAAAA 180
 TGCAATACAG CACTGTGTT AAGAGTGCAG AACGGAGTCA GTCAGCCTGA ACTCGAG 237

(2) INFORMATION FOR SEQ ID NO:44:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 476 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGCC TTCATGGCCT AGGGAGTNGG 60
 TGTGCTGTG CATTATTTG GATCATGGAA GGTGTAGAT GTGTATTTCT AACTGTAGAT 120
 AATGGAGGAC ACATATTTGG GGAGTTTGA GAGGATGTGT ATGTGTGTGT GTGTGCAGTG 180
 TGGTATTTCT CTATGTTTG GTGGGTGGGG TATGTATCCA TCAAAATATC TCAGATTATC 240
 TGATGTAAGA AAATAATTCT GCATCTCAGT GACTTCCAAC AAGGTAGGTT TCTCATGTAT 300
 GTTATGTGTC CTCCATTGGT TGGCTTTGAT CAGTACTGG TCCTGTGCCT TGGATCCAGA 360
 TGGATGAAGC GGCCTCATTT GGGACAGGAC TAGAAGGACT TCTTCTGCTC AGAGTCATAC 420
 ATGGCATTTC TGATCACATT TCATTTGCCA TAACAAGTCA TGTGGCCATA CTCGAG 476

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

```

GAATTCGGCC TTCATGGCCT AGGCAAATC TGCTGGACTT AACTTCATCA ATGTAGTGGG      60
CTCTGTTTGT GGGGCCCAGG CTTTGATGAG TGGTTCAAAC CCCATGCTGG GCTGTAACAC      120
TGGTGCCATA ACTCCTGCAG GAATAAACCT GAGCGGCCTT CTACCCTCAG GAGGTCTGCT      180
ACCAAATGCA CTGCCCAGTG CAATGCAGGC AGCTTCTCAA GCAGGTGTTT CATTGGTTT      240
AAAAAATACT TCAAGTCTCA GGCCCTTAAA TCTACTCCAG CTTCCAGGTG GTTCACCTTAT      300
TTTAACTACT CTGCAGCAGC AGCAACAGCA GCTCTCCCAG TTACACCAC AACTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

```

GAATTCGGCC TTCATGGCCT AATCATTTTG ACTTTCAGTG CTTTCAATGA CCAGTGGCCT      60
CCAGGGATAA AGCAACTGCT TGGTTTGCAG GCGTCTCTCT GCGCTGCTGA GCCATCAGCC      120
TCCAATACGC CAATGCCCAT AGATGCTAGT TACAGCCCTG CTTCTCCTA CATAGGGTTC      180
TGTCATCACT GAGTCTCACC ATTTCCCTCT CCCCAGTGTC TTTATTATGT GACACACACA      240
CACGGCACTA TGTTTAAAAA AGCGTGCTCA CTGGCAACCT CTTGGCGTTG TGTGTTTATT      300
CTGTGTTTGT TATTGGTGGT ATCTGGGGT CGACCGAAAG AGTCAACCTC GAG              353

```

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```

GAATTCGGCC TTCATGGCCT AGGGAGCTAC CAGATGCTGA AGAAAGGGCC CTGGCAGACT      60
GGGTTCAAAC TCAGCCATTG TCAGCTTGGT AACCTTGACC AAGTGTCTTC CCCTCTGTGA      120
GCCTCAGTIT TCTCAATAGT AAGAGGGGAT AACACACTTA CCTCTCATAG CTGTGGACAT      180
GGAGGTGAAA GTGCCGCATA CACTGTAAAG TGTATATAC GTGTAAGAGA AAAAATCGGG      240
CCAGAGGCTG GGCTTGTGTT AATTGATTCA GGAAATTAC CAGAGGCCCC CTAGATGCAA      300
CGTCCTTTGG GTGTCTGGCA GTGGGCACAA AGATGAACAA AACAGTGCCC CACCCTCACC      360
CGTCAACCG TCAGTGCAGC AGTGGGCTGG GTGCTTGCGT CCCACAGTGA GGAAGGCAGA      420
AGGGGTCCCT GCCCTCAAAG GAGGACGATA CTCGAG              456

```

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

```

GAATTCGGCC TTCATGGCCT AGCTGCCCCG CAGCACTTAC CGGAGCGACC ATGAGGGTGA      60
CGATTTGAAG CACACACAGG CTTCCTGCTA CCTCCTTTAA ACCGCCGCTG GCTTGCCAGG      120
GACAGACGGC GCGGTTGGCT CCCCAAAATT CCGACTGATA CGCGCCTCGG CGAGCGAAAG      180
CAAACGCGGG ATACTCTCGC GTTCCTGATT GGCTGCAGTT GGAATTGATC ACACCTTTTC      240
AGTTGTACTT CAATCCTGAA TTAATCTTTA AACACTTTCA AATATGGAGA TTAATCACCA      300
ACTTCTTATT TTTTGGGCCA GTTGGATTCA ATTTTTTATT TAACATGATT TTTCTATATC      360
GTTACTGTCT AATGCTAGAA GAAGGCTCTT TCCGAGGTCG GACAGCAGAC TTTGTATTTA      420
TGTTCTTTT TGGTGGATTC TTAATGACCC TTTTGGTCT GTTTGTGAGC TTAGTTTTCT      480
TGGGCCAGGC CTTTACAATA ATGCTCGAG                                     509

```

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

```

GAATTCGGCC TTCATGGCCT AAAGCAAGTG ATTTTCTTTT TTTTAAAGAC AGGGTCTCAC      60
TTGGTCACCC AGGCTGGAGT ACAGTGACAT CATCACGGCT CACTGCAACC TCGCCTCTT      120
GGGCTCAAGT GATTCCCCCA TCCCCACCC CCCTTCTCAC CCCAGATTG GACTATAGGC      180
GTGTACCACC ACGCCTGGCA GAGACCGGGT TTTGCCGTTG CCCAAGCTGA TCTCGAACTC      240
CTGAGCTCAA GCGATCTGCC CGTCTCAGCC TCCCCTAAGC AAGCATTTTT AAGTTTCTAT      300
GCTGTTTAAT TTTTTTTAAC TGATTAATTT ATTGTCATTG TGTGGTCATG GAATATGTTT      360
TTATGATATT GGTGTTTGA GATTGTTGTA GTCTTTCTTT GTAACCTAGT TAAACCATTC      420
CATATCTTTT TAAAAGGATG TATATTCCTT ATCTGTTAGG GCTCGAG                                     467

```

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

```

GAATTCGGCC TTCATGGCAG AGTGAAGGG GTTGTAATA TTAGGAGAGA GATAATTCTT      60
AGTGCAATTC TCTGAGGATG AAGCATGAGA TGAATCCATG GCACGAATGG AACAGCTGGG      120
GAAAGCAGGT CAGAAATGGAT ATGGATATAA ATACTGTGAG TTCTCGAG                                     168

```

(2) INFORMATION FOR SEQ ID NO:51:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 228 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

```
GAAGTAAATT ATTACGATTT CCTTAGGTGG TTAATAAATT ACCATTATTT TCTCTATTTT    60
ACAGATCAGC AAATGATAAG TAACTTACCG AAAGTTACAT TATTAAAGTT AATCAAATGT    120
TTATTGATTG CCAGACTTTT TTCTAGGCTT AAGCAAATGT TGGAAAATAC TTCTCTGAGC    180
TTTCAAAAAT GTTATTTCTA CTTGTCAGTG CTGCAGGAGT CTCTCGAG    228
```

(2) INFORMATION FOR SEQ ID NO:52:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

```
GCAGAGTCAA TAGATACTTT AAATTGAAGT AAAGAATTAA AAAAGGAAGT GGATAGTTTG    60
GGTATTAGTT TAGCTAGAAA TACAAAGAAA CTTGACTTCT AGGGCAGTAC AAATTCAAGC    120
CTTCCACAAA CAAACAGTTG AGAGTATGTT TATCTTCTTA AAATGTGTGG GTGCCTTCCC    180
ACCACTTCAC CTGCTCCTCA CTGGTGCTTT GTCCCCTCCC TACTACCATT CCTGTCCCGG    240
TCTCGAG    247
```

(2) INFORMATION FOR SEQ ID NO:53:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

```
GGCCAAAACA AAGCTTATAA AGGTTCTGTC TCCCAACGTA ATTACCTCCA ATCGGCATTT    60
AAAGACATCC GCATTGCTTA CAGCACATCC TAGCCTCATG CTTGCCCAAG GATGGACTCG    120
AAATGAACTA TTTCCAGAGC GACTTATTCA GGCACTTCTGT GGAGCCTCCG TTGCCCTGTC    180
CATCACCGBA GCTTTTGTA TGCAGCTAT GCCATTGGCC TCCGGCAACC TCGAG    235
```

(2) INFORMATION FOR SEQ ID NO:54:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

```

GAATTGCGCT TCGTGGCCTA AAAAGAAAAA ATCTAAGGTA GATTGTGCCT TTTGTGCCTT      60
TCCTCTGCTC AAGACCTTTC AGTGGCTTCC CACTTCACTC AGTAAAAGGC AAAAAGTCCT      120
TTTAATAACC TACAAGGCAT TATGTTACCC ACATTGTCCC TGCTCCCCTA CATTGTACTC      180
AAGTCTATGA TCTTTTACC ATTCCTTGTA CAAAGGATT TCACTGGCTG G                231

```

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

```

GAATTCGGCC TTCATGGCCT AGAAATATTT TCCTACAAGA GTAAGTGAATT TCAGGAAATG      60
GGATAGAGCT TCTAACCAGT GTATTCCGTC AAGTAAGATA ATAACAGCTG ACCTGCCAAC      120
AGCATTACAG GGAGATTCTT TGCTCAGCTA ACACATTTCT GTTTTTCAAA ATTGATGCTT      180
AATTGTAGCT GTTATTCTAA TTTGTGACAT GGAACATACT CATGCTTCAA TCCTTGATAG      240
AGCAAACTC AGAACAGGTT ATGTAAAAAT ATAGTCTGGC TTTAGAATTT GTTAATTACAC      300
CTGCTTTGCC ACAGAAATG GAGACTCGAG                                330

```

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

```

GAATTCTAGA CCTGCCTCGA GATCTGAAT ATAATCTTTT CCATTCTATC TAGTCCCAT      60
CCTAAGTCCT CTCCTCTTAA CGTGGAATC TCCTAAAATC TTCTCCTTAT ACTAGGGTTC      120
GAGACATGAG GCTGTCTTTT TGGGCCTTTT GCGTTGTCAC AGTCCCAGAC CACGGAACAT      180
TCTCTCTTCC CCAGGACAGG ACATTCTCTC TTCCCCAGCG CTCCTCGAG                                230

```

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

```

GAATTCGGCC TTCATGGCCT AAAGGGAAAG TGGGAATATA CACAATGCAN AACTAGCCA      60
CATGCAATCA TGGGAGAAAC GAGCCTACTT AAAAATCANA CCCAAGCTTT GCTTCAGAAA      120
TAAGTGGAGT TGAACCCATT CGATCATTTA CGCATGACTT TGCAAAGGTT CTCTGGAGGG      180

```

```

GGAAGAGGAT CAACCTTCTC TCATACCGCA CAGCAAGGGA ACCAAAGTAA TATAATCAC      240
TCTTAAAAAT GTCATGTTAC TTTAAGAATA AGCCATACTG CTGGCACCTA GAATATTTT      300
GTGGGTCCCC ATCTCTGGCT TTTCTTGTTT AAATGGCCCC CAGGCTAAGA GGCAGCTGCT      360
CACATCCCTG CAACAAACAT GTTCTTTCTT TTCTGCATAG CCTTCCATTT CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:58:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 289 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```

GAATTCGGCT TCATGGCCTA CTAGACCTGC TCAGTCGTTC CTAATGAATA AAAATCAAGT      60
GCCAAAGCTT CAGCCCCAGA TAACTATGAT TCCTCCTAGT GCACAACCCAC CACGCACTCA      120
AACACCACCT CTGGGACAGA CACCTCAGCT TGGTCTCAAA ACTAATCCAC CACTTATCCA      180
GGAAAAGCCT GCCAAGACCA GCAAAAAGCC ACCACCGTCA AAGGAAGAAC TCCTTAAACT      240
AACTGAAACT GTTGTGACTG AATATCTAAA TAGTGGAAG TCACCTCGAG      289

```

(2) INFORMATION FOR SEQ ID NO:59:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 382 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```

GAATTCGGCC TTCATGGCCT AATTGAGGC CTGGGTGGAA CTGACAGGTG GAGTTTGAAG      60
GCACATCTGC TAGCTCACAT AGGAAACAGA ATCTCCCAGG GAAAAGACAT AGGACCTCTG      120
ACTCTAACTG AGGTTCTGGA TTATTATGAG AGATTTTCAG AAATGGTCTA ATGGTGTGG      180
CTTGCTCCAT ACCATAGATT TTAAGAGACA GTAGAGCTTC TGCGATGAGA TTCCCCCATA      240
AAATAATTAT GGATCTGCAC TGGCAAGCTG GTCTTGGCTC CAAAGACCAA GAGTTGGTTT      300
GTGGTGCTGA TTCTGAACCC TTGCGATGCA ACTGTCTGGT AGTAAATGG CTITGTATGG      360
TAAGAAAGCT TTAATCCTCG AG      382

```

(2) INFORMATION FOR SEQ ID NO:60:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 196 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```

AAAAAAAAC CAAACCCTAT TATTTCAATG ACAGATTGTC TTAGAGTTGA TAGCATTTAA      60
TAATTGAGTA AGTACAGTCC TTCCTTGTTT CCAACGTGCC CTATTTTTTC TTTCTTCTCT      120
ACTTTTGCAT ATGCATTTTC CCTCTTTCTT GTTCTTGGT GAATTCCTAA ACCTTTTTTT      180
TCAAAATCAC CTCGAG      196

```

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```

GAATTCGGCC TTCATGGCCT AACACATTT TTCTAATTAG TGTCTAGAC TGGCTAGATA      60
AATCAACAAT GAATCAACAG TCTTTAAGCA CATATACAGG TATGATAACT CTGTAGTTAA      120
CTCAAATCCT TGTGCTATGT ATTATTTTGC TGCCTAACTC AGAATTCAGG AAGCTACCCA      180
CCCAATCAGT CTTTAGCTGT TTTATTTTCTG TAACAAGTTT ATGCAGAACC TTCCATATCT      240
CTCATAAAAC CAGAGCATTC ATAGAACCAG AAACCTCTCGA G                          281

```

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```

GAATTCGGCC TTCATGGCCT AAAAGATTG AGCATTTCAA AATTTTAAAC ATAAAAGCAT      60
AAACGTAGAT AAAATGAAGG TGTACTATGA TATCTTCAGT TTTATCAGAA ATGATGTAAA      120
AATTACAACC TCTTTAAAAA GTAGTGTTAA TCATTAAGTT AGAAAATATA TAGCTGGGCA      180
TGGTGGCAGA TGCCTGTAAT CCCAGCTACA TGGGAAGGTG AGGTGGGAGA ATCGCTTGAA      240
CCCAGGCAGT GGAGGATGCA GTGAGCCAAG ATCATGCCAC TGCACCCAG CCTGGGTGAC      300
AGAACAAGAC TCCATNTCAA GGAAAAAATA AAAGAAAAAT ATATATATGA ACTTCAGAAT      360
CTGAGGTCAT ATATAGACAG GTCTTCCCCC CGTCCTCGAG                          400

```

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```

GAAACCATAG TGGCAGATTT GTAGCAAAAA GAATCTTTGT AACCTTCCCT TTAGATGTCC      60
TGTGTTATGG CTTGGTTTTT CTCAAAGATC ATAGATTGCA GTGTTTATCT CAACTCAGTA      120
TTTCCTTTGA AAATTGAACT TTTCTCTATA TTTTCCTTTC CCCCATGCAA ACTTTTGTAT      180
TGTTTTTCTG AAATCATAAT TCATTGACT TACCAGTTAA TATTGATACA GGTCTTGCAT      240
GTTATGAAGT GCATTGTGTA CATTATCTTG TTTAATTTTC ACAACACTCT TCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```
GGTCGCAGAA GAGTGTGAGA ACAATCAGTT AAAGAAGCTC AAAGAAATCT GTGAGAAAGA    60
AAAGAAAGAA TTAAAGAAGA AAATGGATAA AAAGAGGCAG GAGAAGATAA CAGAAGCTAA    120
ATCCAAAGAC AAAAGTCAGA TGAAGAGGA GAAGACAGAG ATGATCCGGT CATATATCCA    180
GGAAGTGGTG CAGTATATCA AGAGGCTAGA AGAAGCGCAA AGTAAACGGC AAGAAAAAAT    240
CGTAGAGAAA CACAAGGAAA TACGTCAGCA GATCCTGGAT GAAAAGCCCA AGGGGGAAGG    300
TTCCTCCTCA TTCTGTGCGG AAAGTTGCCA TGAGGATCCC TCTGTTTCCC CCAAAGTCGA    360
G                                     361
```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```
GAATTCGGCC TTCATGGCCT ACTGGGGGAA GAAGGCTGCT TTATGTTTAT TTTCAAGAC    60
TTTAAAAATA TTTTGTGGTT GTATTGCACT AGGAAATCTC TCCACCTCT CCCTTTTCTC    120
TTTCTTTCCC TATACAAAAT AAAAGGCCCA CCATAGAGAC TAGGCGGCCG AAAGACTAGG    180
AGGGCTGAGG AAAAGAAATA GGTCTCTGGA GGTGGAATA AAGTGTGCA GCTGCCTCTT    240
CCTGGCGGTG GATGCTGCTT TGGGAGGGCC AGGGAGGCTG CAGGGGGACA GTGTTGGGAT    300
TGTCAGGAA AAAGGGGTAG GAAGGAAGT GGAGGATTG ATCTAGTACC AGGGAGAATA    360
TTCCACTGAA CTGTGATTCT ATGCGGCCTC GAG                                     393
```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 335 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```
GAATTCGGCC TTCATGGCCT AATTGTGTTAT TGCTAGAAAA TACACAGTTT TGAGATTTTT    60
GGGCATAATT GGCCTTAGTG TGTCACCTCT GCATTAAAAT ATAGGTAAAT AATCAGATGA    120
AAGCAGCCAA TAACCTATGG CTCTGTACT TTCTGGTGAA AGTTTGTGTA ATGTTTTTAA    180
TTTGTATTTT TCTGCTTATA AATTGTCTCT TAAATCACTC CCTCCTTCC CGCCCCCGG    240
ACTCCTTCTC CCTCCTTCCC GCCCCCCCAA CTCCTTCTCC CTCCTTCCCG CCCCCGCGAC    300
TCCTTCTCCC TCCTTCCCGC CCCCCGATCC TCGAG                                     335
```

(2) INFORMATION FOR SEQ ID NO:67:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```
GGTGACATAT TTATTGCTTC TGTTTTCCAA CTACATCACT TCAACTAGAA GTAAAGCTAT    60
GATTTTCCTG ACTTCACATA GGAGGCAAAT TTAGAGAAAG TTGTAAAGAT TTCTATGTTT    120
TGGGTTTTTT TTTTCCCTTT TTTTITTTAA GAGTATAAGG TTTACACAAT CATTCTCATA    180
ATGTGACGCA AGCCAGCAAG GCCAAAAATG CTAGAGAAAA TAACGGGATC TCGAG        235
```

(2) INFORMATION FOR SEQ ID NO:68:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```
GAATTCGGCC TTCATGGCCT ACCACAATCT GTTTGCTTTT CCTCTTTAGA TTCCAAAAAT    60
AACACCCCAA AGGCTACCTT TTCAAATATT CTACAACATC TGCAAAAATC TTTAGTACTC    120
TGTCCTTGGA GTCAGTCAAG AAATTCCACC CCAGAAGTGT AAAAACCAAT CAATAATATA    180
TGACACTGAT TTCTCTAAA TTATTATTTT TCTTATGGT GAGTCTCCTG CCAACTTTAT    240
GTTTCCCAAT CGGCTCG        257
```

(2) INFORMATION FOR SEQ ID NO:69:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```
GAATTCGGCC TTCATGGCCT AGCTGGGCAT GGTGATGCAC GCCTGTAATT CTAGCTACTC    60
AGGTGGGGGG TTAAAGGTGA GGCAAGGTCA GCGGTGAAGT GCAGCTCAGA GGGAGGGGTC    120
AAACATAAAC CAGAACTTAT AGGTCTAGAG GTAAAATGGG ATTCAATGGG GGCAGAGGTC    180
AAAGGTGAAG CAGAAGTCAG GGGTGAAGGA AGGTCTGCAA AGTTAAAGGT GCGGTTTCCA    240
GAGTCAGAAG GGGTGCTCGA G        261
```

(2) INFORMATION FOR SEQ ID NO:70:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 279 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

GAATTCGGCC TTCATGGCCT AGATTGAATT TTAAACACAG TCCTCTCAGA AACTGACTAA	60
AACAGGTTTT AAAATTAGCA AATATTAAGA ACATACGAGT AAAAGTCAGT TTATTTTAGA	120
TAAGTAGGGA TTAAATTCA ACAAAAATAA ACACATTTTA AACTCCTATA ATACATTTAT	180
TTAAAATAAA TATATTTTGG CCAAAAGAAG TGTAAGTTCA AAGAGTTAAC ATACAGATTA	240
TATCCTATGA GATATAATAA TATTAGAAAC TGGCTCGAG	279

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

GAATTCGGCC TTCATGGCCT AGTTACATTT ATAATCAGTG AGGAAAATAT AACTATACA	60
ATAAATGAAA GGGTCATTGG CCAATTGTTT GGAGGGGAAA AATACACCAT GTTCTAAAT	120
AAATTTCTAG TGATTTATTG TGACTTTCAT GCATTGGAT GATTTTAAAG ATTTTATATA	180
AAAATGAAC CATAGCCTTA CGAGAAGAAA ATATAAGAA AACTTGTAT AGTCTGGGA	240
GGGGGGATTC TCGAG	255

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

GCGATTGAAT TCTAGACCTG CCTCGAGATC GTCTTTTCTA CCTGGATGAG AGCTCTACCA	60
CTTCTTTCCT TTGACACAT CATCTCATTC TATGCACTCT TGGGCTGTAA CTGTCATTTT	120
TTTTCTGTGA CACTCGAG	138

(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

GAATTCGGCC TTCATGGCCT ATCACATTGC ATTAAATCTG TAGATTACAT TGAGCATTAT	60
GGACATCTTC AAAATATTTT AAATTTTGAA CAGGAGCATG CTGAAGAGTG TGTTGTTTAA	120
TTTCTATGTA TTGTACATT TTTTCTCT ATCTTATACT GCCGAGACCA GCTCAGTCGG	180
GGAGACCCTA ACCCAACGGC AGCTCGAG	208

(2) INFORMATION FOR SEQ ID NO:74:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```

GAATTCGGCC TTCATGGCCT ACATGAACT GTTAGTCACT TCATTCTGT TTCTTCCCTG      60
TTGCAACAGC CCATCTTCGT GGAAGAACC AAGCTTTAGG CTGGGCTCTG AACAGCCACA      120
AAGTGACTTG GCTGAGGTCC TGCCATTTCG CTCATGCTCA GCAGGGGGCA GCAGACCAGG      180
GCAGTTCAGA GTATGGGGTC AAACCCAGGT CCCTGTCCCC ACTCCACCTG TGGATTTACC      240
CTGGATTGGG CAAGCCCCAT TACTCGAG      268

```

(2) INFORMATION FOR SEQ ID NO:75:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```

GAATTCGGCC TTCATGGCCT ACGTGAACAA GACCCTCCCA AACCTTCAGG TAGTCAACCA      60
CCAGCAAGGC CCCCAACCACA GACACATCCT GAAGCTGCTG CCGTCCATGG AGGCCACTGG      120
GGGCGAGAAG TCCAGCACGC CCATCAAGGG CCCCAAGAGG GGACATCCTA GACAGAACCT      180
ACACAAGCAT TTTGACATCA ATGAGCATTG GCCCTGGATG ATTGTGCTTT TCCTGCTGCT      240
GGTGCTTGTG GTGATTGTGG TGTGCAGTAT CCGGGAAGAG CTCGAG      286

```

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

```

GAATTCTAGA CCTGCCTCGA AAATACACTG TTAATATCTT AATCTCAAGA GTGTCATTAC      60
AGTGAGAATC TCATTAAAAA GCATACCAGT GAAATTAATA GCAGTGCTTA TCAAAGAACA      120
CTGAAATCTG TGAGAATCTT TCTAGGAGCA TTCTTTTCTT CTTTGTAGTC CAAGTCCAG      180
GTAGGCCATG AAGTCGAG      199

```

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

```
GATTGAATTC TAGACCTGCC TCGAGTTCCA CGTCCATGGC CATCCTGAGC ATGCTGCAGG    60
ACATGAATTT CATCAACAAC TACAAAATTG ACTGCCCCGAC CCTGGCCCCG TTCTGTTTGA    120
TGGTGAAGAA GGGCTACCGG GATCCCCCCT ACCCAAACCTG GATGCACGCC TTTTCTGTCT    180
CCCACTTCTG CTACCTGCTC TATAAGAACCC TGGAGCTCAC CAACTACCTC GAG          233
```

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 276 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

```
GAATTCGGCC TTCATGGCCT AAGAATAGAG AAAACGTTTT CAGCAGGCTT CACAGAGAAA    60
CCAAACAATA TTTAGAATAT GACAGCATAT GAAGAGTCTG CTA CTCTCCC AGTGACCCAT    120
ACTTTCTCTT CCATCTCTGC TGGTTCTCTC TACTACCGAT TCTTTCTTGC TGTTCCTCTT    180
CTCCATCACC GTGACTTCTA TTGCCTTACT CTAATGTCTT GTCTTCTGTG TTACCCTTCT    240
GTGTGTTTTG CATTAGAAC TCCCCCTCCG CTCGAG          276
```

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 273 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

```
GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAAAATCCCT GGCTGAGAAC TATTGGATTA    60
GGGCCTCCNG TACCTATCTT TGAGGGGGAA AGGATGCTAC CATCAACTTT TCTGAATGCC    120
AGGAATGCCT TTTAGTATAG TTATTCACT TACTATTTTA TAGCATATTT TAATTGTATA    180
GTAAGCATTG TGTCTGTTTT ATGGTAAGGA AACTAAAATT GAGAGATTAG GCTGCTCGTG    240
GTGGCTTATA CCTTGTAATC CCAAGCACTC GAG          273
```

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 284 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

GAATTCGGCC	TTCATGGCCT	AGCGAAATGA	CGAAATCTAG	CCCTTTGAAA	ATAACATTGT	60
TTT TAGAAGA	GGACAAATCC	TTAAAAGTAA	CATCAGACCC	AAAGGTTGAG	CAGAAAAATTG	120
AAGTGATACG	TGAAATTGAG	ATGAGTGTGG	ATGATGATGA	TATCAATAGT	TCGAAAGTAA	180
TTAATGACCT	CTTCAGTGAT	GTCCTAGAGG	AAGGTGAACT	AGATATGGAG	AAGAGCCAAG	240
AGGAGATGGA	TCAAGCATT	GCAGAAAGCA	GCGAAGGGCT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:81:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

GGGAACTGGA	GGAAAACCAT	CACAAGATGG	AGTGCCAGCA	AAAAC TGATC	AAGGAGCTGG	60
AGGGCCAGAG	GGAAACCCAG	AGAGTGGCTT	TGACCCACCT	TACGCTGGAC	CTAGAAGAAA	120
GGAGCCAGGA	GCTGCAGGCA	CAAAGCAGCC	AGATCCATGA	CCTGGAGAGC	CACAGCACCG	180
TTCTGGCAAG	AGAGCTGCAG	GAGAGGGACC	AGGAGGTGAA	GTCTCAGCGA	GAACAGATCG	240
AGGAGCTGCA	GAGGCAGAAA	GAGCATCTGA	CTCAGGATCT	CGAG		284

(2) INFORMATION FOR SEQ ID NO:82:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

GAATTCGGCC	TTCATGGCCT	ACTGTGTTGA	CTTGGTGGCT	TGCTTGATAA	GAAGGTTTTA	60
TGAAGCACAG	CAGATATCTC	AGCTGCTAAT	CCTGTAAGCC	CTTACCCAT	TCTCGCTTTT	120
CTCTGCTCTT	GCCACATCAT	GAATAGATTG	GTATACTATT	GTGGGATACT	TCTAGTTTTA	180
GCACATGATA	TAGGTTATGG	TTAATGTTCC	TTTCCATCTT	CCTGGTTACT	GATAATGTTT	240
CTTTTCTGTA	GATGGGTCTA	TTCGATGGAA	GAGTTTCAGC	TTTGTTCGTG	TTATTTCCCT	300
GGGACCTCGA	G					311

(2) INFORMATION FOR SEQ ID NO:83:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

GAATTAATCG	TAAGAGAACC	TCAGCATTGT	GCACGATAAG	AGAATGTGTC	AGTATTTTCAG	60
GGTTCACAT	TTTATCTGTA	AAATGTGACT	TTTTTTTTTT	TTTATCACAA	CAGAAGTAAA	120
ATGTTGCTTT	GTACCTGGTG	TCTTTTATTA	AGAATTACT	CCCCCATTT	CTCACAGAGA	180
ATAACAGTCG	GGAGTCATTG	TCACAATATA	ATAGAAATGT	TAGCAACCAG	ATTCATGTAA	240

GGACTAAGTG GTCCTCATGA ATTGCATTAA GACTCTGTAC TGCTCATATT AACTCCATC 300
CTCTCTGTAG TTTGCTGGGT ATTCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:84:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 312 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC TTCATGGCCT AGAAGACAT CATTAAAGTN CTTTAAACAT TTAGTTTG 60
 GTCATAAGTT GACCTTTATG TGCTTCTGA ATTGGAACCT AAAATAATCT TTAATTCATT 120
 ATTTTCTTA CTTCTAGGCC AGTTTGTAGT TTAATATTA TAAAAGGTTA GATAGTTATA 180
 GATAGGATTA TTTTGCAGTT TTGAACAAC ATACAAATTG TTATAGATTT CAGAGTAGGG 240
 CTAATCACAG GAAAGACAAA AGTCAGAATG CTTNAGGTAA GCCCCTTCTC ATTATATAAG 300
 ATCAAGCTCG AG 312

(2) INFORMATION FOR SEQ ID NO:85:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 304 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GAATTCGGCC TTCATGGCCT AAAAATTTC AACTTAGAAA AACTAGCAAG GGATTGTTCA 60
 CCCTTACCCC AGTGTTGGT GCTAGAGAAA AAATGGAGGA TGTCTGTTCC ACGCAGACCC 120
 TGGTGGTTTA AAACACACAT ATAGATGGCT CTGGGACCAT CAAAATAGCA GCAGCAAAGA 180
 GCCACTCCAC CAGCCTCCCC TCCAATCCCC CAGGCCCCAC ACAGCAGAAG GCTCCAGCCA 240
 CTTTGTGGAA GCCTGTAGCC TGGCTCCATC TTGCCCTGTG CCACAAATGC CCATGGCCCT 300
 CGAG 304

(2) INFORMATION FOR SEQ ID NO:86:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

GAATTTTGAA CACTAAAGCT TTGGATACAC AAATTTATAA CATCTTATTT ATAAATCAGT 60
 GGTGTACAGA AAGCAGAGAT CCCATAATCA AGCATGGCAA ACATGTTGAA GAATATGCTT 120
 ACAATGATTT CTGCTATAGA TTTCATAATG GGGATTGAGA GAAGTAGAGT TATGGTGCTG 180
 GTTCACTGCA TTGATTGGAT CAGGCGCTGG AAATCTCTCC TGATAGATTT TATCTCACC 240
 TGTTGGGCAA TTTCCAGAAT ATTCTGCTGT AATTTTACAT GTGGGCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:87:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```

GAATTCGGCC TTCATGGCCT AGCTAGAAAA AAAAAAAAAA AAGCCCTTTT CAGTTTGTGC      60
ACTGTGTATG GTCGGTGTAG ATTGATGCAG ATTTTCTGAA ATGAAATGTT TGTTTAGACG      120
AGATCATACC GGTAAAGCAG GAATGACAAA GCTTGCTTTT CTGGTATGTT CTAGGTGTAT      180
TGTGACTTTT ACTGTTATAT TAATTGCCAA TATAAGTAAA TATAGATTAT ATATGTATAG      240
TGTTTCACAA AGCTTAGACC TTTACCTTCC AGCCACCCCA CAGTGCTTGA TATTTCAGAG      300
TCAGTCATTG GTTATACATG TGTAGTTCCA AAGCACATAA GCTAGAAGAA GAAATATTTT      360
TAGGAGCACT ACCATCTGTT TTCAACATGA AATGCCACAC ACATAGAACT CCAACATCTC      420
GAG

```

(2) INFORMATION FOR SEQ ID NO:88:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTT GGGGGGATTA CAGTTCAACA AGAGATTCAG      60
GCAGAGACAA ATATTCCAAA CTATATCAGG AATTAAGTAG GCTTTGCTGT CCTTTTGCAG      120
CTTTGAGTCA ACCCATATGA GAGTGAATTC TCCGATCTCG TACATACTCG AG              172

```

(2) INFORMATION FOR SEQ ID NO:89:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

```

GAATTCGGCC TTCATGGCCT ACCCGTGTG TCCAGTATAC CTTATAACAC TTAGCCACTT      60
CTCCCCACCC TCCAGAAGGG GTCCACGTTG AATTCTGAAT CATCTTGAAA ATAAGATTCC      120
AACCACAAAA AAAATTTAGC CATTTCTTTA CTAAAAAAAA CCAAAAAACA AATCTGTTTT      180
ATAATCACAG ATTTTITAGC AAATTTCTTG TATCAGGAAG AAATACAAAT TTTGTCATGT      240
TTCTCAAGCA GTGTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:90:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

GAATTCGGCC TTCATGGCCT AAATAAGAT AAAATAAAC AGATAGGAGA GCTGAATTCC	60
ATTCAAGTC CTCATGTATA TGCTTACAAA GTTCCAAATT AAGCTTGGGA CTGGTTCTTA	120
CATGGCAGGT AATCCAAACC TTTCTATTT ACTGAAGATT TTCAGCTCTC TTACAGAAAT	180
ACACAGGCTA CCATTAAAT TGTAGGATA AATTTTAAAT TGAATTTGAA AATAAGAGCA	240
AGTACTCGAG	250

(2) INFORMATION FOR SEQ ID NO:91:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 260 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

GAATTGAAAC ACAGAGTTGT TCTGCTGATA GTTTTGGGGA TACGTCCATC TTTTAAGGG	60
ATTGCTTTCA TCTAATTCTG GCAGGACCTC ACCAAAAGAT CCAGCCTCAT ACCTACATCA	120
GACAAAATAT CGCCGTTGTT CCTTCTGTAC TAAAGTATTG TGTTTTCCTT TGGAAACACC	180
CACTCACTTT GCAATAGCCG TGCAAGATGA ATGCAGATTA CACTGATCTT ATGTGTTACA	240
AAATTGGAGA AAGTCTCGAG	260

(2) INFORMATION FOR SEQ ID NO:92:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 354 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

GAATTCGGCC TTCATGGCCT AATTCATCT TTTTTCCTG GTGCTGCATA AACATATATT	60
AAATGTTGT ACTGATCCCT AGTACTGTTG ATTTGTGACC CTTCTCCTGA GGGAGACTAA	120
AGCTGCTTGA GCTAAAGGCT TTTGAGACAT CCCATACGGT TCCCTGAACA AAGTTTCTC	180
TCCTGACCTC AGTTCTCTTG ATGACCTTGG CAAGTGGGCC CGACTAGTTG GACACTAATG	240
AGGCATCGTA ACATGCCGGC CCCATCCTGT CCATTCTGTT CTCTTTGCCA TCTAGCATTC	300
AGTGTGTGT CTTCTAGTG GGCATGAAGA CGGCTTTAAA ACCATCCACT CGAG	354

(2) INFORMATION FOR SEQ ID NO:93:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 493 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

GCTGAAAATG	CAAAACATGA	AGAAAGTGAT	TGAGGCAATT	CGAGTGGAGC	TGTTTCAGTA	60
CTGGGACCAG	TGCTTTTATA	GCCAGGAGCA	GAGACAAGCT	TTTGCCCTT	TCTGTGCTGA	120
GGACTACACA	GAAAGTCTGC	TCCAGCTCCA	CGATGCTGAG	ATTGTGCGGT	TAAAAAACTA	180
CTATGAAGTT	CACAAGGAAC	TCTTTGAAGG	TGTCCAGAAG	TGGGAAGAAA	CCTGGAGGCT	240
TTTCTTAGAG	TTTGAGAGAA	AAGCTTCAGA	TCCAAATCGA	TTTACAAACC	GAGGAGGAAA	300
TCTTCTAAAA	GAAGAAAAAC	AACGAGCCAA	GCTCCAGAAA	ATGTTGCCCA	AGCTGGAAGA	360
AGAGTTGAAG	GCACGAATTG	AATTGTGGGA	ACAGGAACAT	TCAAAGGCAT	TTATGGTGAA	420
TGGGCAGAAA	TTCATGGAGT	ATGTGGCAGA	ACAATGGGAG	ATGCATCGAT	TGGAGAAAGA	480
GAGACTCCTC	GAG					493

(2) INFORMATION FOR SEQ ID NO:94:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

GAATTCGGCC	TTTCATGGCCT	ACACACGGCC	AAATTGAGG	GCATTCTCAC	ATGTGTTCTT	60
CTCTCAAAAC	CACCTGGGGTT	GACAGATCCA	GGAGGCTAAA	AAAAAGTGAC	CTCTATAATT	120
CTTTAAAGGT	GCTATTTTAA	GAANATTGTA	TAATTTATTC	ACAGTATATC	TAAAACAGAA	180
TTAAGGACAA	TTAAATATATC	TTATGTGACA	GCCTTTATGT	CTAGTCACAT	TTGATGAAAT	240
AAAAAACTTC	TGAATCTGAA	TAGAAGTTCT	ACTGINTCAG	GATTGAACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:95:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

GAATTCGGCC	TTTCATGGCCT	AAAAAGACAG	GAAAATAAGT	CTCTTTGTAT	CCTTATTAAT	60
CATTTGAAAT	TATGCTATAA	TATTTTAA	AACTCACCTG	TTTGGTTCTG	GGTGAAGCAG	120
TTCTGAAGG	AGTGTGTTGT	CAGAAATATAT	TGTTAGGTGA	ATAGAGGGTT	CTGTGGCCAA	180
GTAAGTTTG	GAAATAGTGG	GTTAGACAAA	GTTGAGTTAC	TGTTGGCCTT	TCAGACCTTT	240
GATACGCTAA	TGTGCATTTT	AAATCTCCAA	GAAGCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:96:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

GAATTCTCCA GCCTGGGTGA CAGAGTAAGA CTCCATCTCA AAAACAAAAA AACCCAACAG	60
GATAAAATTT AATAGGAGTA AATATAAAGT TCTACGTTTT GATTTTAAAA ATCTAGGTAC	120
TGTATAGTGT GTATTAGTTG GGGTTCCTTT TTTGAAACTT AATCTTGCCT ATAAAAACACA	180
AAAGAGTTTA AGATGATATT GAGACTCCTC CTGTCCTCAT TCCTTTTCCT TCCTAATAGC	240
TCAGTCCTGA AGCTCTTAGG TGAGGCAGAA CAACTCGAG	279

(2) INFORMATION FOR SEQ ID NO:97:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

GAATTCGGCC TTCATGGCCT AGGATACCTT CATTTCAAGG AGCCTCTTTA CAGTAACTGG	60
GCTAAACATT TTGTTGTCGT CCGTCGGCCT TATGTCTTCA TCTATAACAG TGACAAAGAC	120
CCTGTGGAGC GTGGAATCAT TAACCTGTCC ACAGCACAGG TGGAGTACAG TGAGGACCAG	180
CAGGCCATGG TGAAGACACC AAACACCTTT GCTGTCTGCA CAAAGCACCG TGGGGTCCTT	240
TTGCAGGCC TCAATGACAA AGACATGAAC GACTGGTGT ATGCCTTCAA CCCACTTCTA	300
GCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:98:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

GAGCTGTGTC AGCATCGATC AGGGGTCTGT AGACAAAAAT TCCCAAAGAT TTGAGACTTT	60
ATTGGGGGAA ACAGATCACT GCGGGGAAT AAGCCACAGG CCAAAGGAGG AAATGCTGGG	120
ACCAGAAGTC CCGCTTGCCG CCTTTTGCTA AAAGTTCCGC ACGCTGCTC GCGTGCGCG	180
CAAGCATAGT GTCGTGCGGG CTCTGCGACG TCTGATTGGC TCTCTGCAGT GCACCGTCGA	240
GGTAGAAGGC TCAGCTCCTA GTCGCTCCA AATTACTTTG TTGGTGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

GAATTCGGCC TTCATGGCCT AGCTTGAGGA ATGACCCAAC TCTCTCTGGA AAGTCACTTT	60
---	----

```

GCCTCTCTGT TCTGGTTCTC TCATTTTATA AAGTGCCTTC TTCCTTTCTG CATTTTATAAG    120
TAAACATGAG AAAAATCTGA AAAGACTTCT TCAGGATGTT TAAGGAAACA AATGTTGCTT    180
TCCTTGGGTT GGGTCGTTTC ATAAGAGTGA TGTTTGCCAT AAAACTGGAG CCTCATAGAC    240
GATCCTGCAG GGAGGAAGCT TTCCTTGGTC ACCTGACTCA TGTGTTTATA TATAGTATAG    300
AGGAGAGGTA TTCCAAAAGA CCCGTCGCTT TTCCTGTGTC CCACAGCTGC CTGTAGAGTT    360
GTGGCACCAT AAACTTTAGC AGCTGGAAT CCTCGAG                                397

```

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

```

GAATTCGGCC AAAGAGGCCT ATTAATTTAA TAAAGCCATA TCATACCTCT CTTTAACATT    60
GTAAAGGA AACTGTGTGT GTGTATTGT GTTAATGTTA ANTTCTCTTC ATTTTGTGC    120
TTGGGGGGCT GTTTATTGA GGATGGTCGG GGGGGGGGTG GGTGAGACCC ATCCATCCCC    180
CATGGAAGAC CAGACCCATC CATCCCCCAT GGAAGACCAT TCCCGTGTGT TCAGACTGGC    240
AGGGTACTTC CATAGACAGG AACATTCTGG ATGCTCTGAT GCTGAACACT ACCAGAATCG    300
GCCATGGATT TGCTTTGAGC AAACACCCCG CAGTCAGGAC TTAATCCTGG AAAAAGGACA    360
TCTTCTCGAG                                370

```

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

```

GAAAAAATA GACAAACTA TGATGTAAAA ATGCTTAAAA ACAATTATTC CTCTCTGCTA    60
ATTTAATGC AAAATAAATG ATGCTAGCAT TTAATATGTT TATATGATCT TGTTTTAGG    120
ATTGAAATTT TAATACAATG GCCTTTTGTA ACTATTTTTA CTATTATAGC TCAGGTGTTT    180
GAATTCTCTC TACCCCACT ATCACCCCTA TCCCTAACA AAGAGTCTGG CTTTCATAAAT    240
ACTGTTGAAT GAAAATTGGT TCTCTAAATG GTTAACAAGA TGAATCCACA TAAATCATAA    300
TTCAGTACTG AGGAACCGAA TTTATACCCA GCGTCTCGAG                                340

```

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGA TGTGAGAATG ATGGGCTTGG    60

```

```

AGTGTCTCTGG AAATAGCTGG GAGGCCTGTG TGTTTAGGAG CGCCTTAAAC AGTAGGATAT 120
AAGGGCAGAG AAGTAGCTGG GAACTGAGAA GAACTTTGGC TGTATTCTA GTAAGACTGA 180
AAATTTTCAGG TGGGATTGGA ACAGAGATGT GTGGTGATCT GACTTGGTTC ATTCTGCTGT 240
GGTGAAGAGA CTGGAGGTGC GGGGCAAGTA TGGGAAGCATG GAGACCATT AATTATGGGG 300
GCAATGGTAG AGGGAAGAGA AACAATGCTA TTAAGTGGAG TAGGAGCACA CAGAGAACAA 360
GCCACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GCGATTGAAT TCTAGACCTG CCTTGAGATC ACCGAGTGCT TCATCTCTGA CAGTTCCTCT 60
GACCAGATGA CCACAGGCAC CAACGAGAAC GCCGACAGCA TGACATCCAT GAGCACACCC 120
TCAGAGCCTG GCATCTGCCG CTTTACCGCC TCACCACCCA AGCCCCAGGA TCGGACCCG 180
GGCAAAAACG TGGCTGTGCC CATCCCTCAC CGGGCCAACA AGAGTGAGTG CTCAGACCAC 240
CTCCAGGCA GTGCCCCCCC GACTCTCGAG 270

```

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

```

GAATTCGCCT TCATGGCCTA ATATGCTTAT GAATATGATG TTGATGGACA GCTCCAAACA 60
GTTTACCTCA ATGAAAAGAT AATGTGGCGG TACAACTACG ATCTGAATGG AAACCTCCAT 120
TTACTGAACC CAAGTAACAG TGCGCGTCTG ACACCCCTTC GCTATGACCT GCGAGACAGA 180
ATCACTCGAC TGGGTGATGT TCAATATCGG TTGGATGAAG ATGGTTTCCT ACGTCAAAGG 240
GGCACGGAAA TCTTTGAATA TAGCTCCAAG GGGCTTCTAA CTCGAG 286

```

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

```

GAATTCGGCC TTCATGGCCT ACTTAAATCT TAGATGCTAA TGGGAGAAAC TGATTTTTTA 60
AAAAACAGGG AACTAATTA ACATTTTATC AGATATGCTA TGAAGTAAAC AGTTGAAGAC 120
TGACAGTCCA GTGGATACCG AGGAGTTCCT TTAGATACCC TGGTGAGGTA AGGACACAGG 180
CAAGGGGAGA GCTGAGACCT GAATATGAGG AGAAGCCAGG CGAGCACACA ATAGGGCAGA 240

```

AAGGAGCAGT AGGTCAAAGC CTGAGGCAGG AGAGAGCTTG ACTGACTCGA G

291

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

```

GAATTCGGCC TTCATGGCCT AGAAATGGTT CTGAAAGCGA CAGTAGAGAG ATGCAGTTGT      60
GATGATTTCA ACAACCTGGA TGTTTCTTT CTCCTCTTTG CTTCATTCA TCTCTGTGG      120
CTGCTGTTGA TGGAGTCAGA CAGTAAACAC GTGGCTTGGA TAACACCCAT CATCCTATGA      180
AGAATATAGG GAGTACTTGT TCTCTGTGTA TTCAACTTTT ATGTCCTCCG TAACATTGCC      240
CTTATGAAGG TACCTGTATT TGTATGGACT CTGAATAAAG AAGAATTCAT TTGTTTAGCA      300
AGTATTAGTT CAGCAACCAC TGAGAAACAA GCACTCGAG                                339

```

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

```

GAATTCGGCC TTCATGGCCT ACATCATGTC AAAGAGTACT ACATACAGTT TGGAACTCC      60
TAAAGACCCG GTACTACCAG CTCGTTTCTT CACTCAACCT GACAAGAATT TCAGTAACAC      120
CAAAAATTAT CTGCCTCCTG AAATGAAATC ATTTTTCCTT CCTGGAAAAC CTAAAACAAC      180
CAATGTTCTA GGAGCTGTTA ACAAGCCACT TTCATCAGCA GGCAAGCAAT CTCAGACCAA      240
ATCATCACGA ATGGAAACTG TAAGCAATGC AAGCAGCAGC TCAAATCCAA GCTCTCCTGG      300
AAGAATAAAG GGGAGGCTTG ATAGTTCTGA AATGGATCAC AGTGAAAATG AAGATTACAC      360
AATGTCCTCA CCTTTGCCGG GGAAAAAAG TGACAAGAGA GACGACTCTG ATCTTGTAAG      420
GTCTGAATCG GAGCTCGAG                                439

```

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGAGAGGCA GGTCTAGAAT      60
TCCAAATGTA AAATTTACTA AGGCTTTTCA TGTGGAAGTA GAATGCATAT ATCTTTCTTG      120
ATATAACAAA TGAATTTGGT TGTAGCTAAC GTGTTGTACT AGTAAAGGTC CACCTGCTAA      180
ACTTTTCTT TTTTGTGAG GTATAGACAG TAGAGTGATA CCGATACATG AGGAAAATGA      240
GAACTGGAAT GCAGGCCAAA AGCTGGTCCT TTCCAGATGA ATGTAACCAA GACTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC TTCATGGCCT ACACCTCTCAA ATATGTGGCC TTAAACGGGA CCAAAGTAGG      60
AAAGCAGATA GTGGAAACT TCTCTCCCAA TCAGACCAAG TTCACGGTGC AAAGAACGGA      120
CCCCGTGTCA CGCTACCGCT TTACCCTCAG CGCCAGGACG CAGGTGGGCT CTGGGGAAGC      180
CGTCACAGAG GAGTCACCAG CACCCCGGAA TGAAGCTTAC ACCAACAACC AAGCAGACAT      240
CGCCACCCAG GGCTGGTCA TTGGGCTTAT GTGCGCCATC GCCCTCCTGG TGCTGATCCT      300
GCTCATCGTC TGTTTCATCA AGAGGAGTCG CGGCGGCAAG TACCCAATAC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

```

GAAAAAAGTGG GGTCAAAGAA TTACGGAAAA TGTTGGGAAA TGAAATCTGT TTATGTATAG      60
TTGGTAATAA AATAGACTTG GAAAAGGAGA GACATGTTTC CATTCAAGAA GCAGAGTCGT      120
ATGCAGAATC TGTGGGAGCA AAACATTATC ATACTTCAGC CAAACAGAAC AAAGGAATTG      180
AGGAACTCTT TCTTGACCTT TGTAAGGAGA TGATAGAAAC AGCACAAGTG GATGAGAGAG      240
CAAAAGGCAA TGGCTCTAGT CAGCCGGGAA CTGCAAGGCG AGGTGTACAG ATTATTGATG      300
ATGAACCTCA AGCCAGACC AGTGGTGGAG GGTGCTGTTT TTCTGGATAA CTGTTACGCG      360
CTAAGAAATT AAAAGACAGA ACAAAGTGT GGATCATTGC CCTCGAG          407

```

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAGT ACATTAAAGC AACTTGCATC TCAAAACAAT      60
ACATTTCTCT GGTGGAAGTT TTAGTGAAAA TCGATTTATT CCTCCTCTGA GTTTTACCCA      120
ATGGGTAAG TGTCCTAAAT ATGGGATTCC TTAGAATCCA TCCTCCTTCC CAAGCATTTT      180
CCCATGTTTC CTTCCACCCC CAAATTCTTA CCCCATTTCA GGCAGAGCTG AGCAACATA      240
AGCCTTCTCT GAAGTATTGA GGGAAAGTCT GCTAAACGGC TAAACTACTT AAGGAGCTAA      300
CAGAAAAGGT TGTATCAGAG AAACAGTGGA GAAACACAGG TTTCTAATTA TATCTGGCAC      360
TGGAGAGAAAT GTCAAAGGTA TTGGCCCGC TCGAG          395

```

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

```

GAATTCTAGA AACTACAGTA GTGGGACACA TAACATAGAA GTAATCGTCC AGGATTCTGC      60
TGGAAGAAGT AAGAGTGTTT ACCACATATT TTCTGTTCAA GAGAATAATC ATCTCAGTTT      120
TGATCCCTTG GCATCATTTA TTCTCCGTAC TGATCACTAC ATCATGGCCC GGGTCCTTTT      180
TGTGCTGATT GTGCTGAGCC AGCTCACCAT TCTCATTATT TTTAGATATC GAGGATACCC      240
AGAGCTTAAA GAACCTTCAG GGTTTATAAA TCTGACCTCA TTTTCTCTT AATGTCTCGA      300
G                                          301

```

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

```

GAATTCGGCC TTCATGGCCT AAGCATGCTG TCTTGTGATG GTGATTTCAT GTGTTTTCTG      60
CATGGGATTA TTAACGGCAT CCATTTTCTT GGGCGTCAAG TTGTTGCAGG TGTCCACCAT      120
TGCGATGCAG CAGCAAGAAA AACTCATCCA ACAAGAGAGG GCACTGCTAA ACTTTACAGA      180
ATGGAAGAGA AGCTGTGCCC TTCAGATGAA ATATTGCCAA GCCTTCATGC AAAACTCATT      240
AAGTTCAGCC CATAACAGCA GTCTCGAG                                          268

```

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

```

GAATTCGGCC TTCATGGCCT ACCCGCATCC CAGCTCTATT TAAAAAATA AAGAAGAAGA      60
TAATTCATTT CCTTAAGCTG CCCTTACACT ATTAGTCAGG AATGTTTGTG TTCACTTCCA      120
CTACATACCT TACGATCTCT TTGCTTTGTC TTTTTTTCAG TCAAGTCTCT ATTTATGAGG      180
TGGACAAGCA AGATTGTCGC AAATTTTGCA CTACTGGCAT CGATGGAGCC ATGACAATTT      240
GGGATTTCAA GACCTCGAG                                          260

```

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

```
GAATTCGGCC TTCATGGCCT AACATTTC TGAAAAACGT GATAGAAAGA AGGAGGAGCT 60
GTTTCTAGGA GGGAAATAAA TAATTTGGCA GGAGACTTTT TGAAGTAGAT ATCTATTGAA 120
TAACAAAGTG ACAATGTTCC CCATCCTCTC ATTTCATTTC CCAATTTTAC TTCTCGTCCC 180
AATTCAAATC ATTCTTACTT ATGATCGGCG CTATGTCAGT GCCTCTCAGC TGGTCTTCCC 240
AGACCCAGTC ACCCTCGAG 259
```

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 238 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

```
GAATTCGGCC TTCATGGCCT AATTACATT ATGCAACCAA GCTATCAAAA GGACTGGCTG 60
TCCTTGGGAA TGAAACGTAA CAAATCGTC AATAGAGTAT TATTGGAAAA GATTGTTTTC 120
AGTCATGAAC TAGCTATTTA AATGAGAAAA CAAATGTAAT GATGCTTTCT GTCATGATTT 180
TATAAATAAA TGTCATTGT AGGAAATTGG AAAAATAAAT GAAAAAGAAA AACTCGAG 238
```

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

```
GAATTCGGCC AAAGAGGCCT ACCCTAGACC TGTTTCTGT TCTCTACTCT TGAAATGCTA 60
ATGACCTTCA TGACCAGAGT CCGCTATTGC AGTTTGTGGT TGACAGGCAT CTCTCACTCA 120
CTGTGCTGCA ACTCAACTCT TTATCTTCAA CCAAACAGGG CCTCCCCGCA GCTTTCCAC 180
TGCCACTCAG TGGCACTCCA TCCAGGGTTT CCAAAGTGTA AGACCCCGGA ATTTATCTTT 240
GACACTTCCA TCTCCCTCCA CCCCTCATCC AATTCATCA 279
```

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 656 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

```

GAATTCGGCC AAAGAGGCCT AGTTATAATG ATGGAAGAAG TGGAAAAACT TTGTGATCGG      60
CTTGAAGCTGG CAAGCTTACA GTGCTTGAAT GAAACACTCA CATCATGCAC AAAAGAATAG      120
GAAAGGCTGC TTTGGAAAAA CAGATAGAAG AAATAAATGA GCAATCAGA AAAGAGAAAAG      180
AGGAAGCTGA GGCTCGTATG CGACAAGCAT CTAAGAACAC AGAGAAATCA ACTGGTGGAG      240
GTGGAAATGG AAGTAAAAAT TGGTCAGAAG ATGATCTACA ATTACTAATT AAAGCTGTGA      300
ATCTGTTCCC TGCTGGAACA AATTCAAGAT GGGGAAGTTAT TGCTAATTAC ATGAACATAC      360
ATTCTTCCTC TGGAGTCAAA AGAACTGCCA AAGATGTTNT TGGCAAAGCA AAGAGTCTCC      420
AAAAACTTGA CCTCATCAA ANAGATGACA TAAATATAAA GGCATTTGAT AAGTTCAANA      480
AAGAACATGG AGTGGTACCT CAAGCAGACA ACGCAACGCC TTCAGAACGA TTTGAAGGTC      540
CATATACAGA CTTACCCCCT TGGACAACAG AAGAACAGAA GCTTTTGGAA CAAGNTTTGA      600
AAACATACCC AGTAAATACA CCTGAAAGNT GGGAAAANAT AGCAGAAAGT CTCGAG      656

```

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

```

GAATTCGGCC AAAGAGGCCT AGAGACAAAT AGGTGATACT GAATTTTATA CTGTTTCTA      60
CTTTTCCATT AAAACATTGG CACCTCAATG ATAAAGAAAT TTAAGGTATA AAATTAAATG      120
TAAAAATTAA TTTCAGCTTC ATTTCTGATT TCGAANCAAT CTANACTGTT GTGATGAGTG      180
TATGTCTGAA CCTGTAATTC TTAAANACT TCTTAATCTT CTAGAAGAAA AATCTCCGAA      240
GAGCTCTCTC TAGAAGTCCA AAATGGCTAG CCATTATGCT TCTTTGAAAG GACATGATAA      300
TGGGACCAAG ATGGTTTTTT GGAGTACCAA GCAAGGGGAA TGGAGCACTT TAAGGCGGCC      360
TGTTAGTAAC ATGAATTGGA AATCTGTGTC GAGTACCTCT GATCTAAACG GTAAACAAG      420
CTGCCTGGAG AGCAGCTGTA CCTAACAATA CTGTAATGTA CATTAAACATT ACAGCCTCTC      480
AATTTCAGGC AGGTGTAACA GTTCCTTTC ACCAGATCTC GAG      523

```

(2) INFORMATION FOR SEQ ID NO:120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

```

GAATTCGGCC AAAGAGGCCT AATTTCTTCC TGTGATATGA GAATTTCTTT TCTTTCAGCA      60
GCTTTACCTG CATTTGGCTT TGGCTTTTGC AATCGGCCCC TCATTCTCGA G      111

```

(2) INFORMATION FOR SEQ ID NO:121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

GAATTCGGCC	AAAGAGGCCT	AACCGCGGCC	GCTACTTCGG	CCTCTTTGGA	AAAAAAAAAG	60
TGAAAGAAAA	NATCACAATA	CAGGGAAAAG	TGAGCTAAAA	ATCCCGGCAT	TAAAAAGCCC	120
TTGATGTGGT	CCTGAATCGG	CTATTCTAT	CTGTTCCCTG	AGCCTAACCT	CAGCGCTGGC	180
CTCTCTAAAC	CTCTTTTCAG	TCCTCTCATT	TTGAAAACAG	GGCCCATAC	ACATTCTCTG	240
AAAGCTTGCT	GAGTGATTTA	ACCACATAGT	CTAGGGGAGG	CACTCATCAA	ACATAAGGCC	300
TCTCTTTTGG	ATTTTATCC	TATAGTGGTA	TCTATCTAGA	GGCTGGTGAA	GACAGTGTGG	360
TGGAAGGAAA	GTGGGAAGGA	TACACTGAAA	TAGGACATAG	ACGTAGAGGG	GAGTCGATGG	420
TCATCTGGCT	TGATAGGGAA	AGTTAGAGAG	CTCTCCTGAA	CCACAGTTAC	AGAGCTTGGG	480
ATTATAACAC	ACACAGCCCC	AGAGAAAACA	CTTTGTTTAC	CATATTTTCT	CTTCTGCTGG	540
GGCTCTGGCA	CCTTAATTGG	TCAAAAGGCA	GCACTCGAG			579

(2) INFORMATION FOR SEQ ID NO:122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

GAATTCTAGG	AATGGGTCGG	GAAGTTGAGA	ATCTTATATT	AGAAAATACA	CAACTGTTGG	60
AAACCAAAAA	TGCTTTGAAC	ATAGTGAAGA	ATGATTGAT	AGCAAAAGTG	GATGAACTGA	120
CCTGTGAGAA	AGATGTGCTG	CAAGGGGAAT	TGGAGGCTGT	GAAGCAAGCC	AAACTGAAAC	180
TAGAGGAAAA	GAACAGAGAA	TTGAGGAAG	AGCTTAGGAA	AGCTCGGGCA	GAAGCTGAAG	240
ATGCAAGGCA	ACTCGAG					257

(2) INFORMATION FOR SEQ ID NO:123:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

GAATTCCTGT	AACTCGGAAA	AGATATCAGA	GGAATGTTTCG	TGGCATCAGA	GAGAAAGATG	60
AGAGCTCACC	AGGTGCTCAC	CTTCCTCCTG	CTCTTTCGTG	ATCACCTCGG	TGGCCTCTGA	120
AAACGCCAGC	ACATCCCGAG	GCTGTGGGCT	GGACCTCCTC	CCTCAGTACG	TGTCCCTGTG	180
CGACCTGGAC	GCCATCTGGG	GCATTGTGGT	GGAGGCGGTG	GCCGGGGCGG	GCGCCCTGAT	240
CACACTGCTC	CTGATGCTCA	TCCTCCTGGT	GCGGCTGCCC	TTCATCAAGG	AGAAGGAGAA	300
GAAGAGCCCT	GTGGGCTCC	ACTTCTGTT	CCTCCTGGGG	ACCCTGGGCC	TCCTTGGGCT	360
GACGTTTGCC	TTCATCATCC	AGGAGGACGA	GACCATCTGC	TCTGTCCGCC	GCTCACTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTCTAGA CCTGCCTCGA GAAAATGAAA GTCTTTTCTC AAAAAACTTC TTCCAGGTC	60
TGTGAAGCAG CACAGTGGCC CCTTCTGGCT CTCACCTTGT ACCTCGTCCT TGTTCGCTC	120
GAG	123

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC TTCATGGCCT AAGATGGCGT CTCACAAATC ATATGCCAAT TACTGAAATT	60
GGAGGTGAAA ATATTCTAGA TTTATTGTGG GATATATATA TTTTATGGTG TATGGCTCCC	120
AACACCACAT GCCACTGAAC TATATAAAAC TTTATGTCAG AACACTTACT TGTGTCATAT	180
GTAACCCCTCT TGCAATAAAT ATTCCCTTAC TACAGATCTG TCCCACTGTT CTCAGAAAAAT	240
AAAACATGGG AACGTTGGAA TGTCTCCTTG CTATAAGATA TTGAATTCTA GACCTGCCTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 508 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC TTCATGGCCT ATGAAGACAA AGCTAACTTA CAAAAGCAGC TGGTTGAAGC	60
AATGAATACG CAATTAGAAC TTTCAGAAAC ACTTAAATT CAGAACAAC CTGAAGATAA	120
TGTTAAAAAA CTACAAGAAG AGATTGAGAA AATTAGGCCA GGCTTTGAGG AGCAAAATTT	180
ATATCTGCAA AAGCAATTAG ACGCTACCAC TGATGAAAAG AAGGAAACAG TTAATCAACT	240
CCAAAATATC ATTGAGGCTA ATTCTCAGCA TTACCAAAAA AATATTAATA GTTTCAGGA	300
AGAGCTTTTA CAGTTGAAAG CTATACACCA AGAAGAGGTG AAAGAGTTGA TGTGCCAGAT	360
TGAAGCATCA GCTAAGGAAC ATGAAGCAGA GATAAATAAG TTGAACGAGC TAAAAGAGAA	420
CTTAGTAAAA CAATGTGAGG CAAGTGAAAA GAACATCCAG AAGAAATATG AATGTGAGTT	480
AGAAAATTTA AGGAAAGCCA CCCTCGAG	508

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 713 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

```

GAATTCGGCC TTCATGGCCT AGCGGCAGTC CAGATCACGG TTACTGTGAC CTGACTGGAG      60
AAAAATTATG TGTCTGCAAT GATAGTTGGC AAGGTCCTGA TTGTTCTTTG AATGTTCCCT      120
CTACTGAGTC TTACTGGATT CTGCCAAACG TTAAACCTTT CAGTCCTTCT GTAGTCGGG      180
CTTCACATAA AGCAGTTTTA CACGGGAAAT TTATGTGGGT GATTGGTGGA TATACTTTTA      240
ACTACAGTTC TTTTCAAATG GTCCTAAATT ACAATTTAGA AAGCAGTATA TGGAAATGTAG      300
GAACTCCATC AAGGGGACCT CTCAGAGAT ATGGACACTC TCTTGCTTTA TATCAGGAAA      360
ACATCTTTAT GTATGGAGGC GCCCAAGGC CCGACCCCTC CCCCAAAGGG GCAGTCCCCT      420
TCTTGCAAGT CTCAGCTTGC GGGGTGGGGG GAGTCATGCC CAGGGGAGGA GACTTTTTAT      480
CTGGAGGGGA GAGAAGGATT CTAGGGGTGT GGAGTTGGAG AAAGAGGCTT CCTTGAGCCA      540
CCCTTCCAC CCCAGCCCTT GNTGGTCCCT AGGCCAAGCC ACCAAGTGAA ACCTTCCAGG      600
ATACTAGCCC GCCAGCTGTG GGCCCCAGAA AGCCAGCCTG CCTTTTAGCA CTTGGATACA      660
CACAGACCCA CGGAGCTCTC TGTGTTGGC CTCTCACACA CACACAATC GAG              713

```

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

```

GAATTCGGCC AAAGAGGCCT AAGAGATTCA GGACCTGCAG AGTCGCCAGA AGCATGAAAT      60
TGAATCTTTG TATACTAAAC TGGGCAAGGT TCCCCCTGCT GTCATTATTC CCCAGCTGC      120
TCCTCTGTCG GGGAGAAGAA GGAGACCCAC TAAAAGCAAA GGCAGCAAGT CTAGTCGCAG      180
CAGCTCATTG GGCAATAAAA GCCACAGCT TTCAGGCAAC CTGTCTGGTC AGAGTGGAAC      240
TTCAGTCTTA CACCCCAAC AGACCTCCAC AGTCGAG              277

```

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 670 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

```

GAATTCGGCC TTCATGGCCT AAGGCTACCG ATATTGGAGA AGCTAACTAT GGGTTTTACC      60
ACACGTAACA GCTTTTTGGT GAAATCAGTT GTTATACTAA TAAGCTTTCC TCTAATTGAT      120
TTGAGTTTTG GTTTTTGTGT TTGTATTTGC GGGTTTTGTC TCTTTTGTTC TCTGTGTTT      180
AGTAAATTGG TTTTCTTCA ATGTATTTTC TTAAAGTAGT CTAGCTTTAC CCAGTTTCCT      240
TGGCAAATTG AAATTTAGGC CATGAAGGCC GAATTCGGCC TTCATGGCCT ACTCAGCCTC      300
CCCAAGTAGC TGGGACTACA GCGTGTGCC ACTATTCTCA GCTGATTTT GTATTTTAG      360
TGGAGACGGG TTTTGGCCAT GTTAGTTGGC CAGGATGGTC TCTCTCTCGA CGTCGTGATC      420
CGCCCGCCTC GGCTCCCAA ATTGCTGTGA TGACAGGCGT GAGCCACCCC GCNTGGCNTG      480
TCCTACCTCT TTTTAAAGAC CTCTTCTGT AAGCACTGGA TAATCTACTT CTAGTAATGT      540
GAAACTGACT ATATNTGAA TTCATATGTT TTCAATCAAC CTGTTGCAGT TTATATTCA      600
CACCCGTGCT CCTTTTGACA GTTTAAGTAC AGATAGTCTC AGCAGTTCTG GAGACCATGT      660
AAAGCTCGAG              670

```

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

```

GAATTCGGCC TTCATGGCCT ACGACTCTGC TCTATTACC ACTATCAGGC CAATCCTCCT      60
GACATGCTGT TAATATTAG AAATATTTCT CCAACATTCA GAGTGCCTGG GTACCACACA      120
TGGATGCGAC TAAGATTCTT AAGTCTGGTT TCTAAGAGCT TCTTCAATGT CTCCAATAT      180
CTTTTCAGGC TCATGTTTGA GACCTTCCTT TCAAGAATAA TTTGCTTGTG ATCTGGTTCA      240
AGCTGAACAG AGATTTTCAG ATGACTCCCA AACTATCTGC AACACATCAG CCCTATTAAC      300
TCTTCTCAGA ATGCTCATAC AGAAGCCATG CCAGTGACCA AAAGCCACTT CTGACACCTG      360
GCCCTGTCTG ACTCATGGAT TTCTTCCAGG ATTGCTCTTT CTATCTGCTT TAAACCTCCT      420
TGTC AATTGA CTTTCCTTGG CTCCAACCC ACTTTACTCG AG                          462

```

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

```

GAATTCGGCC TTCGTGGCCT ANATATTCTA AGCATTCAAT TTGTCAGTTT CTGAGATTTT      60
CTTTCATCT TAGTTTTTTA GAAGTCAGAA AATGACTTTT CACATTCAGT TAGGGTATAT      120
AACAATGTTA ACGTAAGTTT ATGAGCTGAG TAGGTAGTTA ATAAACATCC TTTTAAGTTG      180
TAATGCTTTG AAATAGCATA TTAAAGGGTT GCAAGGGAAA ATTGGAACAT CAGTGTGAGT      240
TATTTTACAG TCATTGTAG GTCTGTTTGT GACCTTGGCC TTTTCACACT TGTTTGCTCA      300
TCACCTTTAG TATATTACTC TTTGGCACAG GTTGTCTAAT CACATTAATT TTTGCATCAA      360
AAATCCCTTG GTTTAGTGAT TCTTAATGAT GTTTATTTTG GAAAGTCATG GACCTGAATT      420
CTTTGAGTAG TTCATGAAAA CCATATACCT TTCCAGAGA AATGGGGTGC ATATAATTTC      480
AGGAAGTTCA AGGTAGGGAA AACAAGCTAA AAATCCCAAC TTATTTTCATC TCGAG          535

```

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

```

GAATTCGGCC TTCATGGCCT AAGGGGATCA TCAAAGATGT TGGACACCTT GTGTTCAAAT      60
CTTGGTTCAG GTGCGGCTGT TGCAGATCGG CTTTGTGGTT TGGTTGTCTT GGCCTGGATA      120
CCAGTGGAGA AGATGTATC CATATCATCA TCAATATAG ACTTGGTTTC CACTTCTTTT      180
TTGGACTTTT CTTTGGTTT TACAGTTAAG TCAGCAAAGA TATCAATGTT ATCATCAAAT      240

```

```

AAATTAGATT CCAATGTTTT CTCCTTCTCT CTGGTTTTCT GAGAGGGTTT AATTGCTTCC 300
GTAGCAAATA TATCATCCTC AAAAATATCT TGTGTTGTTA ATATGACATC CTGCTGACTA 360
CTGGATTTTG TCTCATTCTT CTTGACTTTC TGATCCTCGA G 401

```

(2) INFORMATION FOR SEQ ID NO:133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

```

GAATTCGGCC TTCATGGCCT AGTAGATGAA CTAGAAGATG GATAAACGAA GATAGATAAA 60
ATGAAGAAAA ACAAAAGTCA AGGAGAACTC AGGCGTCCAA GAGTGTGTAA ACAACTTCTG 120
GTGTGAGACG CGCTACATTG CGCTAAATGG CCTGTGCGCT TCTGGTTTTT CCCTTCCTCT 180
GTTGATTTTT TATAGTTGTC TTTTATTTTA AACACGCCTC CCCCCCCCCT TTTTAACTG 240
ATTTTACCAT CACTCTCTCT AGCCCTGCCT CCCTAGAATT AGCTGCTTCT TACCTCCCTT 300
GGATCTGGAA CTTAAATATT AACGTGTATA TAAGTTAATA GTAAGTAGAC CGTGAATTTA 360
GAAGAGTAAA ACAGAATCAT GAGTACGTAG TCACTGTGGC CCCTTTTTTG CTGGATTTC 420
AGTTCGTAAG CATTTTGGGA AGAGAGTCGA AGGGGAAGGG GTGGCTTGCC AGTCAGTTGA 480
GTGATGCATG GCTCGAG 497

```

(2) INFORMATION FOR SEQ ID NO:134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

```

GAATTCGGCC TTCATGGCCT AGGCTGGTCA TTGAGAGTGT TGGTGAGTC AAAGTGAAC 60
ACGATGTGAT TGGTAAACAT GTGCTTGATA CATCGAACAA AATATTCTGT CTCTGCTTCT 120
GTAAGTTGAA CAGGCTCAGA AGACTTGAAC AAGGGTCCTA TATTCAGAAA CTCAGGAATG 180
GCAGCCAATT GTTCTTGGGG ATATATTCTT AATGAAGTGC TAGACTATCC AATTACTTAA 240
TTTCTTATAC CTTTAGATAA TCAGTATGAA AAGTTCCCAT TTATAATGGA AATGAAAATT 300
CTTAACTAAA CTATACATGT AATATGTATT TCTAGAAGAG AATAAAAACC CAAGTCCTCG 360
AG 362

```

(2) INFORMATION FOR SEQ ID NO:135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

```

GAATTCGGCC TTCATGGCCT ACCCCAATCA ATGGATCCTC AACTCCAAAT CCAAAGATAG 60

```

```

CATCTTCTGT CACTGCTGGA GTTGCCAGTT CACTCTCAGA AAAAATAGCC GACAGCATTG      120
GAAATAACCG GCAAAATGCA CCATTGACTT CCATTCAAAT TCGTTTTATT CAGAACATGA      180
TACAGGAAAC GTTGGATGAC TTTAGAGAAG CATGCCATAG GGACATTGTG AATTGCAAG      240
TGGAGATGAT TAAACAGTTT CATATGCAAC TGAATGAAAT GCATTCTTTG CTGGAAAGAT      300
ACTCAGTGAA TGAAGGTTTA GTGGCTGAAA TTGAAAGACT ACGAGAAGAA AACAAAAGAT      360
TATGGGCCCA CCTCGAG                                          377

```

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

```

GAATTCGGCC TTCATGGCCT AAGCAAACCT CATGCAGCTG GTGGAAGTAG ATGTGTCTCG      60
AAATGAGATT CCTGAAATTC CAGAAAGCAT TTCATTCTGT AAAGCACTGC AGGTAGCTGA      120
CTTCAGCGGA AACCCACTGA CTAGGTTGCC AGAAAGCTTT CCTGAATTAC AGAATTTAAC      180
ATGTCTTTCT GTAAATGACA TCTCACTACA GTCTCTACCT GAAAATATTG GCAATCTTTA      240
TAACCTGGCT TCACTGGAAC TGAGAGAGAA TCTTCTTACA TATCTTCCTG ACTCTCTTAC      300
CCAGCTGCGA AGACTAGAAG AACTTGACTC GAG                                          333

```

(2) INFORMATION FOR SEQ ID NO:137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

```

GAATTCGGCC AATGAAGCCT ACTTAGTAT TTTGGCACTT CCTAATTGAC ACCTTGGGAG      60
ACTGCAGGAA GGGAAACGAGA ATCATTNNTA GGNTATTTGT GTGTGTGTGT GGTTTTTTTT      120
TTTTTTTGGA AGACAGAGTC TCACACTTTT GCCCAGGCTG GAGTGCAGTG GCGTGATCTC      180
GGCTCACTGC AACCTCTGCC TCCAGGGTTC AAGCGATTCT CTTGCCTCAG CTTCCCAGT      240
AGCTGGGATT ACAGGCACAC GCCACAACGC CTGGGTAATT TTTATATTTT TAGTAGAGAC      300
AGTCTCGAG                                          309

```

(2) INFORMATION FOR SEQ ID NO:138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 599 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

```

GAATTCGGCC AAAGAGGCCT AAACCTCAGAA TGGTGCTACT TGAAGACTCT GGATCTGCTG      60
ACTTCAGAAG ACATTTTGTC AACCTGAGTC CCTTCACCAT TACTGTGGTC TTACTTCTCA      120

```

```

GTGCCTGTTT TGTCACCACT TCTCTTGGAG GAACAGACAA GGAGCTGAGG CTAGTGGATG 180
GTGAAAACAA GTGTAGCGGG AGAGTGGGAG TGAAAGTCCA GGAGGAGTGG GGAACGGTGT 240
GTAATAATGG CTGGAGCATG GAAGCGGTCT CTGTGATTG TAACCAGCTG GGATGTCCAA 300
CTGCTATCAA AGCCCCCTGA TGGGCTAATT CCAGTGCAGG TTCTGGACGC ATTTGGATGG 360
ATCATGTTTC TTGTCGTGGG AATGAGTCAG CTCTTTGGGA TTGCAACAT GATGGATGGG 420
GAAAGCATTG TTGCAATCAC AATGAAGATG CTGGCGTGAC ATGTTCTGAT GGATCAGATC 480
TGGAGCTAAG ACTTAGAGGT GGAGGCAGCC GCTGTGCTGG GACAGTTGAG GTGGAGATTC 540
AGAGACTGTT AGGGAAGGTG TGTGACAGAG GCTGGGGACT GAAAGAAGCT GAACCTCGAG 599

```

(2) INFORMATION FOR SEQ ID NO:139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

```

GAATTCGGCC TTCATGGCCT AACCTTCCTG AATATCTGCC GTTGTGCTG CAAGAAATAA 60
CTAGTCAACC CAAAAGGCAG TATCTTTTAC TTCATTCTT GAAGGAAATT ATTAGCTCTG 120
CATCAGTGGT GGGCCCTTAA CCATATGTTG AAAACATCTG GGCCTTATTA CTAAAGCACT 180
GTGAGTGTGC AGAGGAAGGA ACCAGAAATG TTGTTGCTGA ATGTCTAGGA AAACCTCACTC 240
TAATTGATCC AGAACTCTC CTTCCACGGC TTAAGGGGTA CTGATATCA GGCTCATCAT 300
ATGCCCGAAG CTCAGTGGTT ACGGCTGTGA AATTTACAAT TTCTGACCAT CCACAACCTA 360
TTGATCCACT GTTAAAGAAC TGCATAGGTG ATTTCTTAAA AACTTTGGAA GACCCAGATT 420
TGAATGTGAG AAGAGTAGCC TTGGTCACAT TTAATTCAGC AGCACATAAC AAGCCATCAT 480
TAATAAGGGA TCTATTGGAT ACTGTTCTTC CACATCTTCA CAATGAAACA AAAGTCTCGA 540
G 541

```

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

```

CTTCATGGCC TAGTGGTTCT TCTGAAATCG GCCTTCAGAC ACCTGTCTT GGTAGTACCA 60
ATATCTAAGA AGTGGTTTCA GTTCAATTTT GTTTTCCTCC ATGCCAGAGA GAAGCCACAG 120
TTTCCTAAGC TGGGGAGGAG GTATATCCTT CAAGAGATCG GCTTGTTAGA ATAGACCACT 180
TAACACCATA TGAAAAGCA ACAGACTGAA ACATGGATGT CCTCAAGAAG GGCTGCTGAC 240
ACCTATGATT TGGCAAGGAG ATAAATAACA GAATGTGCAA AGGGTCATAA GAGTGCAGAC 300
ACCCTAATGT CTGTTGGCTG GAAGGTGAGA GCAGTTCACC AGTGAAAATG GGTACGCCAT 360
GAAGGCCGGC CTTATGGCC TATAGGCCAT GAAGGCCGAA TTC 403

```

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

GAATTCGGCC	TTCATGGCCT	AGTCCTCATC	TGCTGGCATT	TTGTGGGGTG	TTAGTGCCAA	60
ACTTGAATAG	GGGCTGGGGT	GCTGTCTTCC	ACTGACACCC	AAATCCAGAA	TCCCTGGTCT	120
TGAGTCCCCA	GAACTTTGCC	TCTTGACTGT	CCCTTCTCTT	CCTACCTCCA	TCCATGGAAA	180
ATTAGTTATT	TTCTGATCCT	TTCCCCTGCC	TGGTCTAGCT	CCTCTCCAAA	CAGCCATGCC	240
CTCCAAATGC	TAGAGACCTG	GGCCCTGAAC	CCTGTAGACA	GATGCCCTCA	GAATTGGGGC	300
ATGGGAGGGG	GGCTGGGGGA	CCCCATGATT	CAGCCACGGA	CTCCAATGCC	CAGCTCCTCT	360
CCCCAAAACA	ATCCCGACAA	TCCCTTATCC	CTACCCCAAC	CCTTTGCGGC	TCTGTACACA	420
TTTTTAAACC	TGGCTCGAG					439

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

GCGATTGAAT	TCTAGACCTG	TGTGTCTAGC	TGTGATGGAA	TCTGAAATGA	AGTTTGACAA	60
GGACCATGAT	GGA CTATTG	AAAATGGAGG	CTATGCAGAC	CAGACCTATG	ATGGATGGGT	120
GACCACAGGC	CCCAGTGCTT	ACTGTGGAGG	GCTGTGGCTG	GCAGCTGTGG	CTGTGATGGT	180
CCAGATGGCT	GCTCTGTGTG	GGGCACAGGA	CATCCAGGAT	AAGTTTCTTT	CTATCCTCAG	240
CCGGGGCCAA	GAAGCCTATG	AGAGACTGCT	GTGGAATGGC	CGCTTACTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

GAATTCGGCC	TTCATGGCCT	AGGGAGGCTG	AGGTGGGAGG	CTCACTGGAG	GCCAGGAGTT	60
CGGAACCAGC	CTGAGCAACA	TAGGGAGACC	TCAGCTCTAC	AACTGAAAAA	AAGATAGCCA	120
GGTGTGTTCA	TGGTGGCACC	TGTCTGTATT	CCAGCCGCTT	GGGAGGCTGA	GGCAGGAGGT	180
TTGCTTGAGT	CCAGGAGTTT	GAGGTTGCGG	TGAGCTACAC	AATGAGCTAT	GGTGGCACTA	240
CTACACTCCA	GCCTGGGCCA	TAGAGTAAGG	CCCTGTCTCT	AACTGGAAGT	CCAAAGAGGG	300
ATCTACTTCC	TAGACTATTA	ATTTAATAGA	TCAATAAAT	AATCAAGAAT	ATGATTTTTT	360
TCTCATCTTT	CTCTGTAGTC	ATATTTTATA	CAGACTTTTT	GTTTAAGTAA	TCTCTCTTTA	420
TGGGCAGACA	ATGATTTCAG	AAACACCCTG	CCTCGAG			457

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

```

GAATTCGGCC TTCATGGCCT AGTCAGCCGT GACTGCACCA CCATACTCCA GCCTGGGTGA      60
CAGAGCGAGA TCTTGTCTTA AAACAAAACA AAACAAAACC CAGACTTCCT ATAATTCCTA      120
AAAATAAATG TGGGTTTGAG AGGCCTACCT TGAAATGTAC AAGATCCTGG CCAGACTTCA      180
CCTATCTAAC AATATGCTAG TAACTATTTG TTGACATGTC TAAAGAAAT GTTCATCAGG      240
GCCTCAGAAA GCAAGGCAGA GAACAGGTCC CTGAAATTTA CTAGCTTGCA CCAAACCATC      300
AGATAAAGAT AGGTTAATAT TTGACAGAAA AAACCTCTCA AAAAGAGACA GTGAAATACT      360
CTTGAGATGA ATCCAGGCGG CTCTCGAG      388

```

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

```

GAATTCGGCC TTCATGGCCT AGGCAGTGGG GGCCTCTGTA ATTCTAGCAT ACAGGTGGCA      60
AGTTATTACA TTATTCTTTT CCTCTGTCT ACCTGCAGTT GGTTTATGT GGGGCGTTAG      120
TACACTTCCC AAAGGGCTTG CCCGAGGTG AGAGGTGCAC ATTGAACTCC CTCACGAGG      180
AGATGGGAAG TGTGGCCATG AGAGAGAGCT TCAGGGGCCC TGGGTTTATG ACATCGCTGG      240
GCCAGGAATG AGGTTAATAT TTTTAATGGC GAAGGGTGAG CCCCCTTATT ACCCGAGCTC      300
GAG      303

```

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

```

GAATTCGGCC TTCATGGCCT ACTGGATGGC ATCTACTTCG TATGACTATT GCAGAGTGCC      60
CATGGAAGAC GGGGATAAGC GCTGTAAGCT TCTGCTGGGG ATAGGAATTC TGGTGCTCCT      120
GATCATCGTG ATTCTGGGGG TGCCCTTGAT TATCTTCACC ATCAAGGCCA ACAGCGAGGC      180
CTGCCGGGAC GGCCTTCGGG CAGTGATGGA GTGTGCAAT GTCACCCATC TCCTGCAACA      240
AGAGCTGACC GAGGCCCAAG AGGGCTTTCA GGATGTGGAG GCCCAGGCCG CCACCTGCAA      300
CCACACTGTG ATGGCCCTAA TGGCTTCCCT GGATGCAGAG AAGGCCCAAG GACAAAAGAA      360
AGTGAACAA CTCGAG      376

```

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

```

GAATTCGGCC TTCATGGCCT AATGGAAAGG ACAAGGAAAA GGGAGAAGGG GTGAGAGTCT    60
GTCCTAGGGG CCAACGAGAA CAGTGAGCTG TTTCAGGGGA GCCATTTCTT TGTCCATGCT    120
CACAAGCCTG TGGATTCTTC CCCCTCTGCA GGAAATTACC TGATGTTCCA AACCCCTCC    180
AGATCCTGTA TATCCGCAGC ATCTCCCTT TCCCTGAGCT GGAACAGTTT CTACAGGACA    240
CTATCAAGAG GTACTAGGGG CCTGGAGGTT TGGGCTCCAA GAGAAGCTTG ACAGAGCCCA    300
CGCCCCACCC CTACTTCTGT TTCTTCCTAA GGTATAATCT GCAGATGTTG GAAGCTGAGG    360
GCAGCATGAA GCAGGCCCTG GGTGAAGTGC AGGCACAGCA GCCCCCTCG AG            412

```

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

```

GCCTGGCCAT CCGGAGAGCT AAGAACCTCA GGCGGCTGCT GTACGTNTCA TGCAACCCCC    60
GGGCAGCCAT GGGCAACTTT GTGGACCTCT GCAGAGCCCC ATCTAACCGG GTGAAGGGCA    120
TTCCCTTCCG GCGGTCAGG GCTGTGGCAG TGGACCTGTT CCCGCAGACC CCTTCTTTTT    180
TCATACTTAT ATGAAAGACT ACATACTTAA AATACTGGTG ATTATATTTA GGACCTGAAA    240
TCATAAGATT GTGGTCTTGC TTTTACTTAA TTTTGTATC TTAGCGATGT CTAGAGTTAA    300
TAAGTGTTC TTTTCTAATC ACAGCAAATC TCGAG                                335

```

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

```

GGATTCGGCC TTCATGGCCT AGTGGGGCAC TAGGATCATC ATTTGGGTGA GAGCCCTCGG    60
CAATGGTGGA GAGGGAGAAG TTATCATTGT GGAGCTCAGA TGGGGTCCGG AATTGTGTTG    120
TCCTACGCAG CTTGGTATTC TCCGTCTTGA GCAGGTAGAG CTTCCTGGCA AAGAACACCG    180
TCATCATGAA GAGCAGGAGC AGGACGAGGG CAGCCGAGCC CACGGCCACG CACATCACCT    240
GGAAGTCGGT GATGATGGAC TCGCAGCGCA TCCCTTGTG CCAGATGTAG TCCTGCGTGT    300
TGCACCTGCA GAAGGCCCTT ATGTTCTCCA CCAGGTAGCA CTGGCCGCCA TTGTGACAGT    360
AACTTGGGAA GAGGTGCGAC ACTGACCGGC AGGAGCCGTT ATGCCGCACA AAGCCACTGC    420
GGCACTCAGT GCCATTTTCA CTGGAGGCCA AGTCCCTGCC TGGCTCTCCT TAGGCCATGA    480
AG                                482

```

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

```

GTTCTTACT AACTTTAATG GCCACAACAT TTAGGCGAAA GGGGGGCAAT CATTGGTGGT      60
TTGGCATTTC CAGAGACTTC TGTCAGTTTC TGCTTGAAAT TTTCCCATTT TTAAGAGAAT      120
ATGGGAACAT TTCATATGAT CTCCATCACG AAGATAGTGA AGATGCTGAA GAAACATCAG      180
TTCCAGAAGC TCCGAAAATT GCTCCAATAT TTGGAAAGAA GGCCAGAGTA GTTATAACCC      240
AGAGCCCTGG GAAATACGTT CCCCCCTCT CCTCGAG      277

```

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 272 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

```

GCTCGCCAC TTTATGAAGA GCGATTTCAC GGCTGCTTGA ACCATTGAA TTTGGATTG      60
TGTTTCAGC TTTAAAGGT TCAACTTTT GCTTCTACCC AGATTGGTCT CAGGTCTGTC      120
TTCTCCAGAT GACCGGTGGT TTCCTGAGCT GCATCTGGG CTGGTGGCTG CCCCTGGCCT      180
ATGGCTTCCA GCCTGACCTG GTGCTGGTGG CGCTGGGGCC TGGCCATGGC CTGCAGGGCC      240
CCCACGCTGC ACTCCTGGCT ACAATACTCG AG      272

```

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

```

GAATTCGGCC TTCATGGCCT AGGGGCGGTG AAACGTCCTG AAGAGCGTCC AGCTCGTGGC      60
CGAGAGGACT CGGGCGCTCC CCACGCTGGA GGCCGTGGAC CGCTCCCTTT AAAAGTTGAA      120
ACGGCCGCCG TTCGGGACGG CTGGCGGGA GGAGGGCCCG ACGAGGGGAG GCTTCAGGGA      180
CAACTGGGGC TTCTCGACGT CCACCTTTT CAGGGCGCGG CCCCAGTAGC CCTCGGGCCC      240
GCCCAGGTAC AGGAGGTGCT TCCCGGGACC CCCGAGTAC CTGGAGGGAC CTCCGAGGG      300
GACTCGAG      308

```

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 438 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

GAATTCGGCC	TTCATGGCCT	ACAATCCCAA	ATGTAGGATC	ATGCCCATG	CCCTAAGCCC	60
AGGCATGAGA	GTCGACATCT	CTCCTCTTAT	ATACAGATCC	AGTCCACAGG	TGAAGTGGGA	120
ACTCTCCAAC	CAGGATTGAG	CACACCATTG	ATGTTGCGAC	TCCTCTACTG	GAACACAGCT	180
TGGAGAAGGG	ATTGGGGCTC	TCATGGCAGG	ATGCAATCCA	CTGTTGAGAT	TGTGACTCAT	240
GCACTTGAAC	CTAAGTCTCA	GGAGTTGTTG	ACTCTTACAC	CCAGCACCCA	GGTGATAGGA	300
CTCTCATGTC	TGGTTCCTGC	CCACAGGTGA	AATTGTGACA	TATACATGGT	CACAGCTCAC	360
AGGTGAGGTG	ATAACTCACA	TACCTGGATC	CAGCTAAGAG	AACAGATTTT	GACTCTGATA	420
TCTTAGGCCA	TGAAGGCC					438

(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

GAATTCGGCT	TCATGGCCTA	CAAGATGACT	AAAGTCTTCA	CTCACCAAGG	AAAAGTGGCT	60
CTGTATGGCA	AGCTGGTGCA	GTCAGCTCAG	AATGAGAGGG	AGAAACTTCA	AATAAAGATA	120
GATGAGATGG	ATAAAATACT	TAAGAAGATC	GATAACTGCC	TCACTGAGAT	GGAAACAGAA	180
ACTAAGAATT	TGGAGGATGA	AGAGAAAAAC	AATCCTGTGG	AAGAATGGGA	TTCTGAAATG	240
AGAGCTGCAG	AAAAAGAATT	GGAACAGCTG	AAACTGAAG	AGGAGGATGC	TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

GAATTCGGCC	TTCATGGCCT	AAATTTAGGA	AGGTCAAACG	TGAATCTCCA	TTTGACAAAC	60
GTCCAACTGC	AGCAGAGATT	AAAGTGGAAC	CCACCACTGA	GTCATTGGAC	AAAGAGGGCA	120
AAGGTGAAAT	TAGAAGCCTA	GTGGAGCCAC	TCAGTATGAT	CCAATTTGAT	GATACTGCTG	180
AGCCACAGAA	AGGAAAAATA	AAAGGAAAGA	AACACCATAT	CTCTTCAGGA	ACTATCACAA	240
GCAAAGAAGA	AAAAACTGAA	GAGAAGGAAG	AGTTGACCAN	ACAAGTCAAG	TCTCATCAAC	300
TTGTTAAATC	ACTCTCAAGA	GTGGCTAAAG	AGACTTCAGA	ATCTACCAGA	GTTCTAGAAA	360
GTCCAGATGG	CAAAGTGAA	CAGCGTAACC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

GAATTCGGCC	TTCATGGCCT	ACAGAGTACT	GAGTGGAA	TACGATGATA	GATTACAAA	60
TAATGTAGCA	TACTTCTACT	TCATTGTATC	TTAAGTTTCT	TGAAATATTG	CTACTGGAGA	120
TTGGAAAGAA	ATCTTAATGT	TATGGGGTAT	TGTCTAAGAA	GCTTTATTTT	AAAACCATCT	180
CATTAAATTT	TGTTGCATT	TAGATAATCG	TCCCAGATG	CCATGTTACC	CTAGTGCAGA	240
GTTTGGGGCT	GGATAAGTTT	TTGTTGTAGG	TGGCTATCCT	GTGTTTGTGA	GGGTATTTAG	300
CAGCATCCTG	GCCTTAAAC	AAAAATGTTT	TCAGACATG	CCAAATGTCC	CCCGAGCGGT	360
AAAGTCACCC	CCAAGTTGAG	AACCGTCTA	TACAAAGAGC	TGTTATTAGA	GCCAGACTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

GAATTCGGCC	TTCATGGCCT	AGATTGCTTG	AGGCCAGAAG	TTCAAGACAG	GCTGCCCCAAC	60
ATAGTGAGAC	CCCCTTCTCT	ACCAAATTT	TAAAAATGAG	CATGCATCTG	TAGTCCTAGC	120
TATTGGGAAG	GCTGAGGCAG	GAGGATCATC	TGAGCCCAGG	AGTTTGAGGC	TGCAGTGAGC	180
TAAGAAGGTG	CCACTGCACT	GCTGTTGTCT	CTCAGCAGAT	CATTTTCAGC	TTTCTTTGGA	240
GAGTAGCCAT	TAGCAATGCA	AATGTGAAGT	TTGATAGCAC	AATAAATAAA	ACACTGAAAA	300
CTGTAGATGT	TACTTATAAA	ACACTGGCAC	TCAGATAAAT	TGGGTTTGGT	CAAGAAGACA	360
GTGAAGCATA	TCCCTGTTGG	GCCAGAGGCT	GTTATCGTTT	TGCTCTGAAT	TCAAAACCTG	420
ATATGTCTCC	AAATTGCTT	AGGGTTGTTA	TCCTGGAAAA	TAGAATCTGA	TAGAAGGTGG	480
GCACATCTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

GAATTCGGCC	TTCATGGCCT	ACTGCTTTTCG	TGAAGACAAG	ATGAAGTTCA	CAATTGTCTT	60
TGCTGGACTT	CTTGGAGTCT	TTCTAGCTCC	TGCCCTAGCT	AACTATAATA	TCAACGTCAA	120
TGATGACAA	ACAATGCTG	GAAAGTGGCA	GCAGTCAGTG	AGTGCAACA	ATGAACACAA	180
TGTGGCCAAT	GTTGACAATA	ACAACGGATG	GGACTCCTGG	AATTCCATCT	GGGATTATGG	240
AAATGGCTTT	GCTGCAACCA	GACTCTTTCA	AAAGAAGACA	TGCATTGTGC	ACAAAATGAA	300
CAAGGAAGTC	ATGCCCTCCA	TTCAATCCCT	TGATGCACTG	GTCAAGGAAA	AGAAGCTTCA	360
GGGTAAGGGA	CCAGGAGGAC	CACCTCCCAA	GGGCCTGATG	TACTCAGTCA	ACCCAAACAA	420
AGTCGATGAC	CTGAGCAAGT	TCGGAAAAAA	CATTGCAAAC	ATGTGTCGTG	GGATTCCAAC	480
ATACATGGCT	CAGGAGATGC	TCGAG				505

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

GAATTCGGCC	AAAGAGGCCT	AGCCGGAGCA	GCTGTCTGGG	AGTCAAGGCT	GCAGTAGCGT	60
TTCTTCATGG	GGTGCTCCAG	GGGGTGCCAC	AGACCGACAG	GCAGCCCAAG	GGCCTGGACA	120
CCCCGCCCA	GGCAGGTGCT	GGCCAGGAG	GACTGTCTC	GGGAATGAAC	CTCCCGCGGG	180
CTTTGGACTG	AGGTCCCTGT	GGCCTCGGTC	TCCTCCCCAT	GAAGTGGGAG	CGAGGCTCCC	240
CAATGGTGCT	TTTGGCTTIA	GTGTACGATG	TTTGCTGTGC	TTCCCGCCGT	GGAGGGCAGA	300
GCCACCCAC	ATCAGGATCG	GACGTGCTAC	CCCTCCCGGT	CCGGGCCCTG	GCCAGCCAG	360
CCAGCCCTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 362 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

GAATTCGGCA	AAGAGGCCTA	ATGAATTCTC	TGATCACAAA	ACAGACCCAG	GAAAGCATTC	60
AGCATTTTGA	GCGACAGGCA	GGGCTGAGAG	ATGCTGGCTA	CACACCCAC	AAGGGCCTCA	120
CCACCGAGGA	GACCAAGTAC	CTTCGAGTGG	CCGAAGCACT	CCACAACTA	AAGTTACAGA	180
GTGGAGAGGT	AACAAAAGAA	GAGAGGCAGC	CTGCATCAGC	CCAGTCCACC	CCAAGCACCA	240
CTCCGCACTC	TTCACCTAAG	CAGAGGCCCA	GGGGCTGGTT	CACTTCTGGT	TCTTCCACAG	300
CCTTACCTGG	CCCAAATCCT	AGCACCATGG	ACTCTGGAAG	TGGGGATAAG	GACGGGCTCG	360
AG						362

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 419 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

GAATTCGGCC	AAAGAGGCCT	AGTTTACAA	AACCGGATTT	GTAATATAAA	CTAGTTAGAT	60
AACTCAGAGG	GTTTTATTGG	CCATATTTT	GTTTATGCTT	TGTCACAGGC	TTTAGTCATT	120
GCTTCCATGT	GTTTTATCC	TTCAGGATAT	CTTCAAGAAG	CCTACTTATG	GACCAAACAA	180
GTTCTGACCA	TCATGGAGAA	ATCTCTGGTC	TTGCTCAGGG	AGGTGACGGA	TGGCTCCCTC	240
TATGAAGGAG	TTGCGTATGG	CAGCTACACC	ACTAGATCAC	TCTTCCAATA	CATGTTTCTC	300
GTCCAGAGGC	ACTTCAACAT	CAACCACTTT	GGCCATCCGT	GGCTTAAACA	ACACTTTCGA	360
TTTATGTATA	GAACCATCCT	GCCAGGTATA	GTGAGGAGTC	AGAAGTGTGA	AAACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```
GAATTCGGCC AAAGAGGCCT ACAGGTAGTA TCTTTATAGC GGTATAAAAA CAGACTAATA    60
CAAACAGGTA GCTCTAAATT GTGAGTTTTT CTTAACTCCT TTGATCTTCT GTGATAGCGA    120
TTTTTCACAT TTCACACTTC CCTAATGCCA AAAATCCACC TCCAGCAGCT GTTTTGCCCTC    180
TTTCTTATCC TGCCCTTGG AAGAAATGTCA TCATTATTGC TGCCACAGCA CTGTGTTCTT    240
TTTCAGAAAGT TACAGCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:163:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 108 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```
GAATTCGGCC AAAGAGGCCT AGTGGTCTGG GGCAAAATTT AGTAAGACCT GGAAAGCATA    60
GGTAATCAAA GCAGAAACTG ACAAATGAGA TGGTATCAAG CTA AAAAG                108
```

(2) INFORMATION FOR SEQ ID NO:164:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```
GAATTCGGCC AAAGAGGCCT AGTTTAACCT CATCAGACAT TATTGCAGCC AGCTGTCAGC    60
CAAGCTCAGT AACCTTCCAA CGCTCATTTT CATGAGGCTA GAGTTCC1GA GAATCCTCTG    120
TAGCCATGAG CATTACCTCA ATCTGAACCT TTTT1TTATG AATGCTGATA CTGCTCCAAC    180
ATCTCCTTGT CCTTCCATAT CTTCCCAGAA CTCAAGCTCC TGCTCCAGCT TCCAGGACCA    240
GAAGATCGCC AGCATGTTTG ATCTGACTTC CGAGTACCGC CAGCCCCTCG AG                292
```

(2) INFORMATION FOR SEQ ID NO:165:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 135 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

```

GAATTCGGCC AAAGAGGCCT AGCAAAACT GTTCAAAGA GTTGTGATT ACTTTCATTT      60
CCACTTTCTC ACCCCCATTC TCCCCTCAAT TAACTCTCT TCATCCCAT GATGCCATTA      120
TGTGGATTCC TCGAG                                         135

```

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

```

GAATTCGGCC AAAGAGGCCT AGAAAAAGTA GCACAGTGGG GTCTGAAATA GCAAGCGAAG      60
AGAAAAGCAG AGCTGCTGAG AGGAAAAGGA TTATTATTAA GATGGAGCCA GAAGATATTC      120
CTACAGATGA ACTGAAAGAC TTAAACATTA TTAAAGTTAC TGATAAAGAC TGTAATGAAT      180
CCACTGACAA TGATGAATTA GAAGATGAAC CTGAAGAGCC ATTTTATAGA TACTATGTTG      240
AAGAAGATGT CAGCATAAAA AAAAGTGGTA GGAAACTCT AAAACCTCGA ATGTCAGTAA      300
GTGCTGATGA AAGAGGTGGT TTAGAGAATA TGAGGCCCCC TAACAACAGC AGTCCAGTAC      360
AAGAGGATGC TGAAAATGCA TCTTGTGAGC TGTGTGGACT TACAATAACC GAGGAGGACC      420
TGTCATCTCA TTACTTAGCC AAACCTCGAG                                         449

```

(2) INFORMATION FOR SEQ ID NO:167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

```

GAATTCGGCC AAAGAGGCCT AAAAGGAAAC TTGGACAAGT AGAAAGTGGG TGACCCAGGC      60
TCCGTTACAT ATACTTGAT TCCAGCTGGG ACCTAGATTT GCTGAGGACG GAAGCCAAGG      120
AGACAGGAAC ATGTGGCTGC TCCAGCTCT ACTCCTTCTC TGCCTCTCAG GCTGTTTGTC      180
TCTGAACGGC CCCGGCTCTG TGAAGTGGAC TCGGGGGGAC TCTCTGACAG TGTGGTGTCA      240
GTATGAGAGC ATGTACAAGG GATATAACAA GTACTGGTGC CGAGGACAGT ACGACACGTC      300
ATGTGAGAGC ATTGTGGAGA CCAAGGGAGA AGAGAAGGTG GAGAGGAATG GCCGCGTGTG      360
CATCAGAGAC CACCCGGAGG CTCTCGCCTT CACTGTGACC ATGCAGAACC TCAATGAAGA      420
TGATGCTGGA TCTTACTGGT GCAAAATTCA GACAGTGTGG GTCCTGGATT CATGGTCAG      480
CGATCCCTCG GACCTGGTTA GGGTGTATGT TTCCCAGCA ATTACAACCC CAAGGAGGAC      540
CACACATCCA GCCACCCCGC TCGAG                                         565

```

(2) INFORMATION FOR SEQ ID NO:168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:


```

GAATTCGGCC AAAGAGGCCT AGTTTCCTTT ATATGTTTGC ACTTAATTTG ATTCCATCCT    60
TCATGCTGTT TTCATTATTC TTAGTTCATC TACACCACAT AAATTATCAC CTTTGTTTTC    120
AGTTCCCCAA TTTCCATGTG CCACAAACAA ATCTCGAG                             158

```

(2) INFORMATION FOR SEQ ID NO:169:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 383 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

```

GAATTCGGCC AAAGAGGCCT AGTCTCACCA TCTATTCTAA ACCTTATATT ATCAATCCTA    60
TTCCCTCTCA CCAAAGAAT CCCTTTATAC AAGTAATTAT CCGTCTATG TCTTTCAACT    120
CTAGTTTCCC CACTGCAACT CTCCCTTAA TATATGTACC TGCTCTGTTA TCCCTCTCCA    180
GCTACTTCCC TATTTCTGT TCCCCTTAC AGGAAACTT TTCTCCAGCA TTTCCCAATG    240
CCATTGTCTT ACTTCCTCAC ATTCTATTTT CTCTCAAAC CATTTTATT AGGCTTCTTT    300
CCCCAATGGC TATTGTCAAG CTTCACCTAA TGCCGTGCAA ATCACCTAT TCTCCAGGTC    360
TTCTTTCTTC CAGTCTCTC GAG                                             383

```

(2) INFORMATION FOR SEQ ID NO:170:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

```

GAATTCGGCC AAAGAGGCCT AAATATTGTC TGAAAAAAT ATATGAGACC CATTACTCAG    60
TCTCTCCTCC TGCCATTAT ACTGCAGGTA TTCCCAAGT TTCTCTCTC AACCTTTGCC    120
TCCTTTCCC TGCTTGCTCC CTAGTTTTC TCCTCTGGGT GGATGACTCC CAAATCTAGC    180
ACTGACCTGT TTGTCCACAT CTTGAGTAT CCCACCACCA TTTCACACCC AGCATATCCA    240
GATGGAGCTC TTATCAGTTG TAACAGCACT GCTCAATTCT AG                             282

```

(2) INFORMATION FOR SEQ ID NO:171:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

```

GAATTCGGCC AAAGAGGCCT AGTGGAAGAG AAGAATGTTT CTGTCTCTC CTACGTTGAC    60
TGTTCTTATT CCACTGGTTT CTTAGCAGG ACTGTTCTAC TCAGCCTCTG TGGAAGAAAA    120
CTTCCCACAG GGCTGCACTA GCACAGCCAG CCTTGCCTT TACAGCCTGC TCTGCCTAT    180
TACCATACCA GTGTATGTAT TCTCCACCT TTGGACTTGG ATGGGTATTA AACTCTTCAG    240

```

GCATAATTGA TGCAACTAGA GTCAATATGC TGTATATATT AATGATAGCT CTTGGGCATC 300
 GATCTCTGAA AGCTCAAATG GATGGAATTT AGTTTGCGGG AACTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

GAATTCGGCC AAAGAGGCCT AGGGGTGTAC ATTTTATTGG AAACCTTAAA TACTGTTTCAG 60
 AAAGAATATA TCTTCAATCA AGGCTCTTGT GCAGCCTACA CAGAAAAATG AAGCTTTTTC 120
 GGTTAGGTGC AACGCTCGAG 140

(2) INFORMATION FOR SEQ ID NO:173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

GTGGTCTCTC CTCCCCTGCC ACTCCCCTCT TCTTTTTTTT CCAACATGGC CTGCTCCGC 60
 GTACATCGCC ACCCAGGGAC CGCTGCCCCG CACCGTGGCT GACTTTTGGC AGATGGTGTG 120
 GGAGAGCGGC TCGTGGTGA TCGTCATGCT GACACCCCTC GCGGAGAACG GCGTCCGCA 180
 GTGCTACCAC TACTGGCCGG ATGAAGGCTC CAATCTCTAC CACATCTATG AGGTGAACCT 240
 GGTCTCCGAG CACATCTGGT GTGAGGACTT CCTGGTGAGG AGCTTCTATC TGAAGAACCT 300
 CGAG 304

(2) INFORMATION FOR SEQ ID NO:174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

GCGATTGAAT TCTAGACCTG CCTCTCTTAT ACCTCGGTGT GGCCGAAAGG AAATAAGCAG 60
 AGGCGCTATT GGCAGGACCT AGAACTTTC CTTGTAACAT AGCTAGTATG TTCCCTCTGC 120
 CCCTTCTTCA TCTTTTCTC ACACTTGCTG GAGCTGGAGC AGCTATCCTG ACCGCAGGTG 180
 CACTCGAG 188

(2) INFORMATION FOR SEQ ID NO:175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

GAATTCGGCC	TTCATGGCCT	ACTATCTGCC	TTGCGCTCCC	ACTGCCCTGA	CCTGTGCCCT	60
CTCACAGGCC	CCCGTGATGG	CTCGCTGGCC	TCCCTTCGGC	CTCTGCCTCC	TCCTGCTGCT	120
GCTGTCCCA	CGCCACTGC	CCTTGACAGG	GGCCCATCGC	TTCTCCGCAC	CTAATACCAC	180
TCTCAACCAC	TTGGCACTGG	CACCTGGCCG	AGGCACACTC	TATGTCGGCG	CAGTGAACCG	240
CCTCTTCAG	CTCAGCCCCG	AGCTGCAGCT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 327 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

GGTCAGCCGA	GCATGATAGG	AGACATCATC	AACCTCGGCC	TGAAAGGGAG	GGAGGGGAGA	60
GCAAAGGTCG	TCAACGTGGA	GATCGTGGAG	GAGCCCGTGA	GTTATGTCAG	CGGGGAGAAG	120
CCGGAGGAGT	TTTCCGTCCC	ATTCAAAGTG	GAGGAGGTGG	AAGATGTGTC	GCCAGGCCCC	180
TGGGGGTTGG	TTAAGGAGGA	GGAAGGTTAT	GGAGAAAGCG	ATGTCACATT	CTCAGTTAAT	240
CAGCATCGAA	GGACCAAGCA	GCCTCAGGAG	AACACGACTC	ACGTGGAAGA	AGTGACAGAG	300
GCAGGTGATT	CAGTGGGCGA	GCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 408 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

GAATTCGGCC	AAAGAGGCCT	AAGCAATGTC	TCCACCACTG	CTGCTGCTAC	CCTTGCTGCT	60
GCTGCTGCCT	CTGCTGAATG	TGGAGCCTGC	TGGGGCCACA	CTGATCCGGA	TCCCTCTTCG	120
TCAAGTCCAC	CCTGGACGCA	GGACCCTGAA	CTACTGAGGG	GATGGGGA	ACCAGCAGAG	180
CTCCCCAAGT	TGGGGGCCCC	ATCCCCTGGG	GACAAGCCTG	CCTCGGTACC	TCTCTCCAAA	240
TTCTTGATG	CCCAGTATT	TGGGGAAATT	GGGCTGGGAA	CGCCTCCACA	AAACTTCACT	300
GTTGCCTTTG	ACACTGGCTC	CTCCAATCTC	TGGGTCCCGT	CCAGGAGATG	CCACTTCTTC	360
AGTGTGCCCT	GCTGGTTCCA	CCACCGCTTC	AATCCCAATG	TCCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 305 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

```

GAATTCGGCC AAAGAGGCCT AGGAGGAATT TCCATCTTGC TCTCAAAGTG AGTCTGAATG      60
TGCTCGGTGG TGTCACCCCC GCGAGCTGCG CAGTGCAGAA GGCCACTATT GAACTCCTGC      120
ACACGCCCCA ACTTGTCAGA TCGGTCAACA ACAAACAGGT TGTTCTTTT GACTATCTTT      180
ATTGGCAGCT TGTCGAACCT ACTGGCTTGC TTGGGCTTCT CCTTTGGGTC TGCAGCGGCG      240
TCCGGGGCAG TCAGAGCGAT GCTGCTCTTT TCATCGCTTT CTGTCTTCTC GCTGTCTACC      300
TCGAG                                     305

```

(2) INFORMATION FOR SEQ ID NO:179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

```

GAATTCGGCC AAAGAGGCCT AGTGCAGCAA TTTAGAGAGT GTCTCAGGAG TGTGGCTCAC      60
TGGCAGCTGC AGCTATGTTA GTGCTTCTTT CTGCCTCAAG TTCAGAAACA AGCTGGACTA      120
TCTCAGGGTG ATTGAATTTT CCTGCTGTGG AATCATAGAA GTCTTGCAGT CTCCCAGGTT      180
TGTGTTCAAG GTCCTCATAT TCAGATGCTT GAAGAATCAT TTCACATTGG TCTAGCATTC      240
AATCGAG                                     247

```

(2) INFORMATION FOR SEQ ID NO:180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

```

GAATTCGGCC AAAGAGGCCT AGTCAAGTTC ATTTCCAGAG GTCTTAAGAC TAAGTTCTGC      60
CTCCTCATTG CAGGTGTGCC GAGAGTTTTT TTTGAACAAC AAAAATTACT AAGGAACCTC      120
ACTACCTTGG GCGGTAGAAT TAGAAAACAG ATTCAGCAGT CACCTACTCC CCTTCAGTAA      180
TTCGAGACAA TTATTTTCTT CCTGACACAA CATCAGGTCC CATGAAAAAT GACACCGTGC      240
CTGGTGTTTT TGGGTTCTTT AATGCTTCTT TTAGAGCCAC ATTTTCTTTT TCAAACCGAG      300
TTCCCATCGC TCGAG                                     315

```

(2) INFORMATION FOR SEQ ID NO:181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

```

GAATTCGGCC AAAGAGGCCT AATTTTCTT CACGTTCTT ATCACCACCA TGGTTATGTT      60
GGCTGCCCTG GCTCACCATT TGTTTTACTG GGATGTTTGG TTTATATATA ATGTGTGTTT      120
AGCTAAGGTA AAAGGCTACA GGTCTCTTTC CACATCCCAA ACTTTCTATG ATGCTTACAT      180
TTCTTATGAC ACCAAAGATG CCTCTGTTAC TGA CTGGGTG ATAAATGAGC TGCGCTACCA      240
CCTTGAAGAG AGCCGAGACA AAAACGTTCT CCTTGTCTA GAGGAGAGGG ATTGGGACCC      300
GGGATTGGCC ATCATCGACA ACCTCGAG                                     328

```

(2) INFORMATION FOR SEQ ID NO:182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

```

GAATTCGGCC AAAGAGGCCT AGTTGTGGAA AAGAAAGACT GTGAGGGTAG GCACAAGAGC      60
ACTCAAATGT CCCAGGTAGA GAAAACAACA TGTATGATGG CCCAGAAGGA GGCAAGTCTC      120
GAG                                     123

```

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

```

GAATTCGGCC AAAGAGGCCT ACTTGACAA GTAGAAAGTG GATGACCCAG GTCCTGTTAC      60
ATATACTTGG ATTCCAGCTG GGACCTAGAT TTGCTGAGGA CGGAAGCCAA GGACACAGGA      120
ACATGTGGCT GCTCCAGCT CTA CTCTC TCTGCCTCTC AGGCTGTTG TCTCTGAAGG      180
GCCCCGGCTC TGTGACTGGC ACTGCGGGGG ACTCTCTGAC AGTGTGGTGT CAGTATGAGA      240
GCATGTACAA GGGATATAAC AAGTACTGGT GCCGAGGACA GTACGACACG TCATGTGAGA      300
GCTCACTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 130 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

```

GAATTCGGCC AAAGAGGCCT AGTTCAATCT GTAACAAGCC TTCTTCAATT TCCTCTCCAC      60
ATACCCTGCA TAGACTTTAA GATTCCTCTG CTCGATGCTA ATAAGAAGAC ACACACCCCT      120

```

CGTTCTCGAG

130

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

GAATTCGGCC AAAGAGGCCT AGGAGGGGGA AGAGAGTCCG TTTTGCAGAA GATGAAGAAA	60
AGAGTGAAAA TTCCTCGGAG GACGGTGACA TAACGGATAA GAGTCTTTGT GGAAGTGGTG	120
AAAAGTACAT CCCACCTCAT GTGAGGCAAG CTGAGGAGAC AGTGGACTTC AAGAAAAAGG	180
AAGAACTAGA AAGCTTGAAG AAACATGTAA AAGGTCTACT TAACAGGTTG AGTGAACCCA	240
ACATGGCTTC CATCAGTGGG CAGCTGGAGG AACTGTACAT GGCCACAGC AGAAAGGACA	300
TGAATGACAC CCTGACCTCC GCTCTCATGG GTGCCTGCGT CACTGCCTCG GCCATGCCCA	360
GCAGACTGAT GATGGAGCAT GTTCTCTTAG TCAGCATCCT TCACCACTTA CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

GAATTCGGCC AAAGAGGCCT ACTACATTTT TACCTAAATT TATAGAAAT CAATTCGGAT	60
TGACATCCAG CTTGCGAGCT ACTCTGGAG GGGCTGTTTT AATTCCTGGA GCTGCTCTCG	120
GTCAAATTTT AGGTGGCTTC CTGTTTCAA AATTCAGAAT GACATGTAAA AACACAATGA	180
AGTTTGCACT GTTCACATCT GGAGTTGCAC TTACGCTGAG TTTTGTATTT ATGTATGCCA	240
AATGTGAAAA TGAGCCATT TCTGGTGTAT CTGAATCATA TAATGGGACT GGAGAATTGG	300
GAAACTTGAT AGCCCTTGT AATGCCAATT GTAACGTACT CGAG	344

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

GAATTCGGCA AGAGCCTAAA ATCTACAAGC ACCAGGAAGT CAAGATGCAA GCACCAGCCT	60
TCAGGGACAA GAAACAGGGG GTCTCAGCCA AGAATCAAGG TGCCCATGAC CCAGACTATG	120
AGAATATCAC CTTGGCCTTC AAAAATCAGG ACCATGCAAA GGGTGGTCAT TCACGACCCA	180
CGAGCCAAGT CCCAGCCCAG TGCAGGCCGC CCTCAGACTC CACCCAGGTC CCCTGCTGGT	240
TGTACAGAGC CATCTGAGC CTGTACATCC TCCTGGCCCT GGCCTTTGTG CTCTGCATCA	300
TCCTGTCAGC CTTTCATG GTGAAGAATG CTGAGATGTC CAAGGAGCTG CTGGGCTTTA	360

```

AAAGGGAGCT TTGGAATGTC TCAAACCTCCG TACAAGCATG CGAAGAGAGA CAGAAGAGAG 420
GCTGGGATTG CGTTCAGCAG AGCATCACCA TGGTCAGGAG CAAGATTGAT AGATTAGAGC 480
GACTCGAG 488

```

(2) INFORMATION FOR SEQ ID NO:188:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 163 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

```

GAATTCGGCC AAAGAGGCCT AGGTCAGATG CATTAAACA TATCAAAATG TTACAAAAAT 60
GTATGGCTCC CTTGCTGAGG CCCTGTCAGA TTATGTTAGA TGAGTAAACG CATCAGTGTG 120
TAAGTTCAGA ACCAAACGTT GAATCAAGTC ATGTACTCTC GAG 163

```

(2) INFORMATION FOR SEQ ID NO:189:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 310 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

```

GAATTCGGCC AAAGAGGCCT ACCTGCTCAT ACCTGTGGCC AAAAGCATGA TGCCCCAGGC 60
TCTGCCTCCA ATTCTACCAT CTTCTCCAT CTTTCTCTT TATCAGGTCT CTGCCCTCCT 120
GTACTTTGTA CTTAGATTCT CCTCTGCCAA GCCCATTGAG ACTGTGACTG GTAGGAGTGC 180
TGTGCTCAGC TTTCCACTTC AGTGTTTATC CAAGAAGTTG GATAACCCCT TCAAGTTATG 240
GCCTCCATTC CAGTGCGCCT CAGTCTATGG GGATGCATTC CACTCACCCCT TGGGCCTAGG 300
GCAGGTCGAG 310

```

(2) INFORMATION FOR SEQ ID NO:190:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 516 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

```

GAATTCGGCC TTCATGGCCT AGGGCCTCAG TCTTTTACT TTTGCGGCTG TGTTTCTCTG 60
AAGGCTTGGC ATTAGTAGAT TGAAGAAGAT AACCATCTAG GGAAATGTGA ATTCAGTTTC 120
TTTCTGACAT TCTGCTCTCT ACAAGGGGAT ATTATGTACA CATAAACCTA CTCCAAAAT 180
AATGAAGTGA GGCCTAATTC CTTACTCTTC AGAGAGCCCA CTGTGGAAGT GTCACTGACC 240
TTGTGTATGG GCTGCCCTTC ATGGCTCTGG GAGTCATTAT AAAGGGCAGC ATTTGGCGTG 300
GTGCGTCCTA AGCCAGTGTT TCTCGGCTCT GTTCCTTAAA CATGTGTTAG TGTTAATAGA 360
TGTTCTTGGA AAAAAAAAAA AAAAAACAGC ATTCTGAGGT CAAACATGCT CAGAAAGCTT 420
GGAATCTGCA CTACGCTTCT CGTACACATT TCATATTAAA GATTTTGGA AGTCCTGCAA 480

```

TACAGAGCCC TGTCTAATAT TGCCACAGCC CTCGAG

516

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

```

GAATTCGGCC TTCATGGCCT ACTTGCTAGA TAGACAGATT AAGAATGTTG AAGACATGGT      60
CCAGTTTATT AATAACATTT TGGATGGCAC AGTAGAAGCC CAAGGAGGTG ATAGCATTIT      120
GCAGAGATTG AAAAGAATAG TATTGATGC CAAATCTACT ATTGTGTCTA TATTCAAGAG      180
CTCACCACTG ATGGGCTGCT TTCTCTTTGG CCTGCCACTG GGTGTCATCA GTATCATGTG      240
CTATGGAATC TACACAGCCG ACACAGATGG AGGTTATATA GAAGAACGAT ATGAAGTGTG      300
TAAAAGTGAA AATCTCGAG                                     319

```

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

```

GAATTCGGCC TTCATGGCCT AAGCAGAAGG ACATATTAGA GAAGGATTGT ATAGTTTTCT      60
GGTAAAAGAT GACAGTGAAT TGTATGGGCG ATGGATTAGC CGTGGGAAGGT GTTGAGTATA      120
AGTGGTCTCC AGCCAAACTC TATGGTTACT GGAATAAGAG AGTAGGAACC TTCTCAGGCT      180
TTATCTTTAT CTATTCTTGT CAACAGTATG TACATGTGTC CCCCAGCCCC AAATAACTGT      240
ACAGTTTAAT GATGTTCACT CTATACAGTT CCCAGAATCC ATTGGAAATT GCTGTAACAG      300
CATATCCTCA ATGCCCATCA ATTCTCCAGC TCCAATTCTT CCATGGCCTC CTCTGCCTCT      360
GCTGATCTGT GAACTTCTCG AG                                     382

```

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

```

GAATTCGGCC TTCATGGCCT AATATTTTAA AAGCGAAAGC TAACTTCTAA TTTTGAAAAT      60
TTTTATTGGG AGCAGGATAT TATAATAATA ATCTTTAGTT GTTAAACCAT TAAACATCAA      120
GGTTTTTTAC ATTGTTTCTA TGCCTCCTCC CTCAAAAAAA AAAAACCTCC TACAATAAAA      180
CTGAAAAAAT GCACAAAGAC ATATTAGTGG AAGACCACTG CTTGTTTTAC ACAAATGAAG      240
AGTATAAAGC AGAGAAAGTC TCCTTGGGGC AAAAGGCAAT TGGCAAAAAG CTAAGGAACA      300
TTTTCATAAT GAATTAGAAA TACAGATCAT CAGGAATATC CAGGAAGCGA TAGTGAATAC      360

```


CAGGCAGGCT TAAGAGACAG GAAACATTTA GCATGTTGGT AAACCACTTT AGCACATCAG 420
 CAAAAGCATA TAAACAGCTT TAGGATTGGA AATTATTGCC AGGGGGGACT CGAG 474

(2) INFORMATION FOR SEQ ID NO:194:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 499 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

GAATTCGGCC TTCATGGCCT ACGTNNCTAT GTCTTCAAGC ACAGAGGTGT CCAGGTGTAT 60
 TGCACATCTT CATCGCACTG AGCTGCATGG ACAGCTGATT TCTGTGGAAA AAGTATAAGG 120
 TGATCCCTCT CAGAAAGAAA TGAAGAAAGA AAATGATGAA AAGAGTAGTT CAAGAAGTTC 180
 TGGAGATAAA AAAAATACGA GTGATAGAAG TAGCAAGACA CAAGCCTCTG TCAAAAAAGA 240
 AGAGAAAAGA TCGTCTGAGA AATCTGAAAA AAAAGAAAGC AAGGATACTA AGAAAAATAGA 300
 AGGTAAAGAT GAGAAGAATG ATAATGGAGC AAGTGGCCAA ACATCAGAAAT CGATTAAAAA 360
 AAGTGAAGAA AAGAAGCGAA TAAGTTCCAA GAGTCCAGGA CATATGGTAA TACTAGACCA 420
 AACTAAAGGA GATCATTGTA GACCATCAAG AAGAGGAAGA TATGAGAAAA TTCATGGAAG 480
 AAGTAAGCAA ATGCTCGAG 499

(2) INFORMATION FOR SEQ ID NO:195:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 337 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

GAATTCGGCC TTCATGGCCT AAGCAAAAGA GCATTAAGAA GTGTCTGTTT TTGTTATTGC 60
 CATTTTCATAA ATATTTTAGT AGGTGTTCAA TTTCATTGGA TATTCTTTT TTTTAATTGT 120
 CTTTGACCT ATGATTGAAA ACAGTAGTTG GTCTATGACT TTTGAGGAGA GGGAGAACCG 180
 AAGATTACAG GAGGCCAGCA TGAGGTTGGA ACAAGAGAAT GATGACCTTG CCCATGAAC 240
 AGTAACAAGC AAAATTGCTC TACGGAATGA CTTGGATCAG GCAGAAGACA AGGCAGATGT 300
 GTTGAATAAA GAGCTCCTTT TGACCAAAAC CCTCGAG 337

(2) INFORMATION FOR SEQ ID NO:196:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 386 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

GAATTCGGCT TCATGGCCTA AAGGAACTG ACAAATTATC CCCAGCTGCC AGAAGAAGAA 60
 ATCCTCACTG GACGGCTTCC TGTTCCTGT GGTTCATTAT CTGATTGGCT GCAGGGATGA 120
 AAGTTTTTAA GTTCATAGGA CTGATGATCC TCCTCACCTC TCGGTTTTCA GCCGGTTCAG 180

GACAAAGTCC AATGACTGTG CTGTGCTCCA TAGACTGGTT CATGGTCACA GTGCACCCCT	240
TCATGCTAAA CAACGATGTG TGTGTACACT TTCATGAACT ACACCTGGGC CTGGGTTGCC	300
CCCCAAACCA TGTTCAAGCA CACGCCTACC AGTTCACCTA CCGTGTTACT GAATGTGGCA	360
TCAGGGCCAA AGCTGTCATC CTCGAG	386

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC TTCATGGCCT AGTTTTGTC TTTTTTCTT TTTTGGTATT ATTTGTTTG	60
CCACTTATTC CTAAAATTCA TATTGCTATT AACCGTACAC ATCTTTCCAT GTTCTTATAA	120
TAATCTACAA ACATCTCTCC CTTTCTGTAG CTCTCTCTGT CACACACACA CACATGCACA	180
CACGCACACA CACACACACA CACACGCTGT GCACTCTCCT GAAGCATGTG TGTACATACA	240
TACATATGTG AGGGGTTTTA TGACTGTTTT ACCAAATTGT GTTCTTAATA TATACAATGT	300
TGGCTTCTTT TTAGCCATTG AGAAGTTATT TCAGTCATGG AATGATCTCT AGCCATATAA	360
CTGAAAACAG GTAAGTTTCT TTCTTGGGGA AGAAGGGCGA ATGGTGATAG AGAAAATGGA	420
GAGCTCGAG	429

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAATTCGGCC TTCATGGCCT ACCAAGCTAT GCAGGAACAG TTGTCTAAGA ACAAAGAAGT	60
GACACAGAAA CTCCAGGTAG CCTCTGAGAG TGAGGAAGAG GAGGGAGGCA CAGAAGATGT	120
GGAAGAACTC CTTGTCCTG ATGTAGTGAA TGAAGTGCAG ATGAATGCAG ATGGGCCGAA	180
TCCCTGGATG CTCAGGAGCT GCACCAAGTGA CACCAAGAG GCTGCAACCC AGGAGGACCC	240
TGAGCAACTG CCAGAGCTTG AGGCCCATGG AGTTTCTGAA AGTGAGGGAG AAGAAAGACC	300
AGTGGCAGAA GAAGAAATTT TGTGAGAGA ATTTGAAGAA AGGCTCGAG	349

(2) INFORMATION FOR SEQ ID NO:199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC TTCATGGCCT AGGGAAAGCT CCAACTTGCT TTACCTTTCT AAGATATCCC	60
ATTTTCTCTA TACCATTTGT TGAATAATAT ATCTCTTGCC CACTGGTTTG TAACAGTGCC	120

```

TTAATTAGTT TTTGTGTTTG AAGTTCAGAG ATCTCTTCCT GGCCTATGTA TTGTGTTCCG      180
TTGATGGATC TTTCCATCCC ATGGTACCCT TTAATTATAT TGTCTTCATT TTTATTACTA      240
TTGTTATGCC CTTTCTCTCT TCCGTGCACA TCTTCATGTT TGAACCTCTAA AAACACACCG      300
CCAACGCTCG AG                                     312

```

(2) INFORMATION FOR SEQ ID NO:200:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 385 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

```

GAATTCGGCC TTCATGGCCT AATATATCCA AGTAATAGCA TGTACAGTTT GGTAAGCAAT      60
ATAATAGAGA GATATTCACA GTGAAATAGG AAAGAGCAGT ATAGGTGCAA AGACAAAAG      120
CATGACACAG CTAGATACAG GGCAGCTGTT ATTGGTTTGG TATGGAGAAA ACCTGGAGAA      180
ATGGTGAGAG AAGGGGCAGA AGATGAGAGG GGCCAGATCA TGGAGTACCT GTTTGTGGCG      240
CTCAGGAGTT TAGATGTTAT CATGCAGATA ACTAGGAGCC ATTTGAGGAA CTAAATACA      300
GGAGTGATAC CAGATTTATA TGTTTTAAAT ATGATTACTT GGTGGTAATT AAAGAAAAGA      360
TTGGATGATT TAGGCAGATC TCGAG                                     385

```

(2) INFORMATION FOR SEQ ID NO:201:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

```

AATTCGGCCT TCATGGCCTA CGTTTTTTTA AATTTTTTTA ACTACATATT TGATACGATC      60
TTTTCCTTCT TGCCTTCTTT TTGATTACTT ACTTTCTACC ATTCTATGTT TTTCGTCAC      120
AGTTTGAAAA TTGTATACTT TGTTTTATT CTTCAGTGG TTACCCTAGA AATTACAACA      180
AACAAAAATT GCAACAACCT CGAG                                     204

```

(2) INFORMATION FOR SEQ ID NO:202:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

```

GAATTCGGCC TTCATGGCCT AAAATCATCA TGCATATTTA TTTCTCCAAA GCACCTTTGA      60
CAAGCATGAT TTGGATAGAG ACTGTGCTTT GTCACCTGAT GAGCTTAAAG ATTTATTTAA      120
AGTTTTCCCT TACATACCTT GGGGGCCAGA TGTGAATAAC ACAGTTTGTA CCAATGAAAG      180
AGGCTGGATA ACCTACCAGG GATTCTTTTC CCAGTGGACG CTCACGACTT ATTTAGATGT      240
ACAGCGGTGC CTGGAATATT TGGGCTATCT AGGCTATTCA ATATTGACTG AGCAAGAGTC      300

```

TCAAGCTTCA GCTGTTACAG TGACAAGAGA TAAAAAGATA GACCTGCAGA AAAAAACAAAC	360
TCAAAGAAAT GTGTTACAGAT GTAATGTAAT TGGAGTGAAA AACTGTGGGA AAAGTGGAGT	420
TCTTCAGGCT CTTCTGGAG AAGACTCGAG	450

(2) INFORMATION FOR SEQ ID NO:203:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 558 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

GAATTCGGCC TTCATGGCCT AACTGGTTTC TGGCTCGTGG ANTCTGTTTC AAGATCATAT	60
AAGCCGTTGC CATTCCCAAG NAGCGCTGGG ATATGCTCCT TCTCAGATGC TGCTATTTCA	120
GTGAAGGTAT TTAATGCTTG TTCAACATTA GATTTCGTGTT TGGTAGCCAT TAAGCAATAG	180
TTTTCCATTA TGCGAANCTG TACGTGACCC TGAACAGTCT GAGGTTTTCAG TTCCTTAANA	240
AGTTTTCCTG CTGTTCTTAC TGCCAGTTGC ACAGATTCTT GCTTCTCAGT TGAATAACCC	300
AGGTCTCCAT CCAGGTTTTC AAATACTTCA CCTCCAACAG TTTCATTATC TGGATTCAAA	360
CAGATCTCTA TCATATTATA AAGGGCATT TGGCCCCAGT CACGATCTTT CCGAGCTTTA	420
TTAAATGTC GAAGGGCATC ATTTGGTTCT CCAAGTGTACC AAAGATACAG TCCTTTACAA	480
TACTGAAATC CTGGTTCCAA TTTTGCTCTG GAGNNACGTT TCTCAGCCAT TGAGAAAAAT	540
CTTGGGACAT CCCTCGAG	558

(2) INFORMATION FOR SEQ ID NO:204:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 348 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

GAATTCGGCC TTCATGGCCT ACAAGTAGGG ACTGACTTCT CTAGGTTCTCT ACAAGCTCT	60
TCAACCACAC TCATTTCAG CTCTGTCAGA ACAGCATCTG AATTAGGAGG ACTTTGGGAT	120
TCTGGGATAC AGGAAGTATC CAGAGCTTTG GATATAAAAA ACCCTGGGAC AGATATTTTG	180
CAGCCTGAAG AGACCTATAT AGACCCTACT ATGATACAAT CTTTAACTTT TCCTTTGGCC	240
CTTCATAATC AAAGCTCCGA TAAGACAGCT AACATTGTGG AAAACCCATG TCCTGAGATT	300
CTAGGAGTGG ATGTAATATC TAAAGAGACA ACTAGGAGGA AGCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:205:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

GAATTCGGCC TTCATGGCCT AAGAAAAAAA AGAAAGAAAA AAAATGATAC TTTCCAGGTT	60
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CGCTTGGGTC CAGATCTGTA TTCCAGGGC TCATAGAGAT ATTGGCAAAC TGACAGATT	120
CATGGCTCAA GAAACCTAAA GACACCTACT TGAATTCCTT TGGTTGGCAG TCAATGTTA	180
ACTAGTGTGT TTTCAAGCTT CTATCTTAG GCATGTTACT TCCTTTTGA AGTCAAAACC	240
AACCATCTTT TAAGTAAGAG GGCTAACCAA ATATGTGCCA CACTAACTCG AG	292

(2) INFORMATION FOR SEQ ID NO:206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

GAATTCGGCC TTCATGGCCT AAAATATTAA AATCTTTGAA GAAGAAGAAG TTGAATTTAT	60
CAGTGTGCCT GTCCAGAGT TTGCAGATAG TGATCCTGCC AACATTGTTT ATGACTTTAA	120
CAAGAACTT ACAGCCTATT TAGATCTTAA CCTGGATAAG TGCTATGTGA TCCCTCTGAA	180
CACTTCCATT GTTATGCCAC CCATCTCGAG GCAGGTCTAG	220

(2) INFORMATION FOR SEQ ID NO:207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

GAAAAAATGG CCAAGGCTAC TGGGAACTA AAGCCAACCT CTAAAGATCA GGTATTGGCC	60
ATGCTAGAGA AAGCCAAAGT TAACATGCCA GCCAAGCCTG CTCCACCCAC TAAAGCAACT	120
TCTAAACCAA TGGGAGGGTC CGCTCCAGCC AAATTCAGC CTGCATCAGC ACCTGCTGAA	180
GATTGTATTT CCAGCAGTAC AGAACCCAAA CCTGATCCAA AAAAGGCCAA AGCTCCAGGA	240
TTATCCTCTA AAGCAAAGAG TGCACAAGGG AAGAAGATGC CAAGCAAAC CAGCTTAAAG	300
GAGGATGAAG ACAAATCCGG GCCTATACTC GAG	333

(2) INFORMATION FOR SEQ ID NO:208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

GGAGACAAGT TCTCCTCAGT GAACTGGCAG TACCACTGTG GGCTTACCTG TGAGCACAAAG	60
GCCGACCTTC TCCCTATCAG TGCATCCGTC CAGTTTATTA AAATTCCTGC ACAGTTACCC	120
CACCCCTGA CAAGATTCCA GATCAATTAT ACAGAGTATG ACTGCAACAG AAATGAGGTG	180
TGTTGGCCGC AGCTTCTATA TCCATGGACT CAGTATTATC AAGGGGAGCT GCATTCTCAG	240
TGTGTTGCTA AGGGCTTACT GTTGCTGTG TTCCTCACAT TGGCCTTGTT CCTCAGCAAC	300
CCCCGGACCA CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 517 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

```

GAATTCGGCC AAAGAGGCCT ATGTCCTGT CCATCTTAGA GGCTGACCAA GCCCAGCCAT      60
GGGTGGTCCA AATTGCTTAG GTGGTCCCAA TTGCTTGGCT GGCCCAAGAG ATGCTCTGGTT      120
CTTAACAATA CAAGAGCCTA TAGAAATTGC TAAAGGGATT TCAGCCACAA CTGAAGCTCA      180
CCAAGAAATGA GTTTTCTGGA ACTGGTTAAA GTGTCACAGT AGGGAGTAAG GAAATAAGAA      240
TCCCCACCAA ACATAAGAGA ACAGAATGAT AATAGTCCCT ACTAGTCCAT GACAAGGCTG      300
CCAATTAGGC ATTAAAGCT ATCAAAGATG ATGCTGTGAG GGACCTGGCA ACTTTTGTAA      360
TAGTCTGACT TTAAATGTTT TATTAATGGC CAAGCAGCAA ATATTTTAGG ATTTGTAGGC      420
TATATGGTCT CTGTCCCAAT TACTCCATTC TGCTACTGTA GCATAAAAGC AGCGATACAT      480
CCTAAACCCG TCGATTGAAT TCTAGACCTG CCTCGAG                                517

```

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 829 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```

GAATTCGGCC AAAGAGGCCT AAGAACATGA AACATCTGTG GTTCTTCCTT CTCCTGGTGG      60
CAGCTCCCCG ATGGGTCTCTG TCCCAGGTGC AGCTGCAGGA GTCGGGCCCA GGACTGGTGA      120
AGCCTTCGGA GACCTGTCC CTCACCTGCA CTGTCTCTGG TGATTCATC AGTCATTACT      180
ACTGGACCTG GATCGGCAG CCCCAGGGC AGGGACTGGA GTGGATTGGA TATTCTATT      240
CACCCGGGAA CTCCAACCTAC AATCCCTCCC TCAAGAGTCG AGTCACCATG TCAGTCGACA      300
CGTCCACGAA CCAGTTCTCC CTAAACTCA NTTCTGTGAC CACTGCGGAC ACGGCCGTCT      360
ATTACTGTGC GAGAGACCTA TATTGCCGTG GGGGAACCTG CTACCCCGCG AGACTTGACC      420
GCTGGGGCCA GGAACCCGG GTCATCGTCT CGTCAGCCTC CACCAAGGGC CCATCGGTCT      480
TCCCCCTGGC ACCCTCCTCC AAGAGCACCT CTGGGGCACA GCGGCCCTGG GCTGCCTGGT      540
CAAGGACTAC TTCCCGAAC CGGTGACGGT GTCGTGGAAT TCAGGCGCCC TGACCAGCGG      600
CGTGACACAC TTCCCGGCTG TCCTACAGTC CTCAGGACTC TACTCCCTCA GCACGCTGGT      660
GACCGTGCCC TCCAGCAGCT TGGGCACCCA GACCTACATC TGCAACGTGA ATCACAAGCC      720
CAGCAACACC AAGGTGGACA AGAAAGTTGA GCCCAAATCT TGTGACAAAA CTCACACATG      780
CCCACCGTGC CCAGCACCTG AACTCCTGGG GGGACCGTCA GTCTTCCTC                                829

```

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

```

GAATTCGGCC AAAGAGGCCT AGTTAATCTG ATAAATTCAC CATCAATTG GTAAGCTTTA    60
ATATAACTAC CCTGTTTTTT GAATACAGAT AATGCAAAAG AAAACCATTT TATACTCGGC    120
TATATACCTT CCACCACTCG AG                                              142

```

(2) INFORMATION FOR SEQ ID NO:212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

```

GAAATTCGGC CAAAGAGGCC TAGTGAATC ATTCTGCCAC ACCATTTCCT ACTCAAATAG    60
GTACAAACAT ACCACAGACA CTCCCATATA CACATGCTCC TCTATCCGCC AACTCTGGAA    120
CCAAACTAA ATTGGTCTTC AAGAGAGATG ATGGCTTTAA GAACAAAAAT AGCCTTATCC    180
TCTATTTTAC TTGCTGTACT GTTGTAATGT TTATTTAAGA AACAAAGCTGG TGGTTGATGT    240
CCAGGAAAAA TTATCTTTTC AAAATGAGGG AAGAGGAGGT TCACCATGTG GATATGGTGT    300
GCCTTTCAAC ATCCTTAAGG ATTGTTGATA TCATTATTGT TAATCAATTG TTGTCAGCAC    360
AGTGGCTGCC CAAGCTGTGC AAATGAAACA GCCAATCAGC AGGAGAAAGT GATGAAATTA    420
AATGACCTCT TTCCTTAACC ACTCATCCGT AAGCCTTGTT ATTTTTCATA CAAACCTCGA    480
GCCGGGGGAG GAGGGGCGGC GGCGAATGCT GGGAGAGTCA GGTCTAGAAT TCAATCGTAG    540
GCCTCTTTGG CCGAA                                                    555

```

(2) INFORMATION FOR SEQ ID NO:213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 97 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

```

GAATTCGGCC AAAGAGGCCT ACGAGAAGGG CGGTGTGTAC AAAGGCGAGG GACTTAATCA    60
ACGCAAGCTT ATGACCCGCA CTTACTGGGA ATTCCTC                                97

```

(2) INFORMATION FOR SEQ ID NO:214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

```

GAATTCGGCC AAAGAGGCCT AAGAAGAAAT TGGTAGATTG CGAGAAGAGA TAGAAGAATT    60
AAAACGTAAT CAGGAACCTT TACAAAGCCA GCTGACTGAA AAGGACTCTA TGATTGAAAA    120
TATGAAATCT TCCCAACAT CTGGCACAAA TGAACAGTCT TCAGCAATAG TTTTCAGTAG    180
AGATTCTGAA CAAGTTGCAG AATTAAACA GGAAGTGGCA ACTTTAAAGT CTCAGTTAAA    240

```

CTCACAATCT	GTGGAGATCA	CCAAACTACA	GACAGAAAAG	CAGGAACTGT	TACAGAAAAC	300
AGAAGCGTTT	GCAAAATCAG	TTGAGGTACA	AGGAGAGACC	GAGACTATAA	TAGCCACCAA	360
AACTACTGAT	GTAGAAGGAA	GACTGTGAGC	ATTATTACAA	GAGACCAAAG	AGTTAAAGAA	420
TGAAATTAAA	GCTCTGTCTG	AGGAAAGAAC	TGCCATTAAA	GAGCAGCTGG	ATTTCATCTAA	480
TAGTACC						487

(2) INFORMATION FOR SEQ ID NO:215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

GAATTCGGCC	AAAGAGGCCT	ACTGGGCCTT	TCAGCACCTG	CTCCAGCTTC	ACCTTGGTGA	60
ACATCAGGTT	GAAGTTCTCA	GGGTGCTCGG	TGATGGCCAT	GTTGACAACA	TCCAGGGCAT	120
GCTGGTGGTG	CTTCTGGGCA	GAGAAGAGCA	GTGCCAGCAG	GTGGAGGGCG	TGGGCATCAT	180
CCTTGCGTAC	CTTCAGGGCC	TCCTGCAGCT	GCTCCATGGC	ACTGGAGATC	TGTCGGACGA	240
GGGCCAGCTG	CAGCGAGACA	TAGAGGATGA	CCTGGGGGTC	ACTGGGCGCC	AGCTGCTGAG	300
CCCTCTCCAG	CGTCTGCAGT	GCCTTCCGGT	GCAATTCATC	TTGCTTGGAC	TTCAGGGTGG	360
CGTCGGTGGC	CTGCAGGCTA	TAGGTGAGAC	CCAGAGCCAG	GTAGCCCTTG	GGGAGGAACT	420
CCCCGGCTTC	CTCTCCGAGG	CTGATCACCA	TCATGGCAAA	GTGCTCTGCT	TCCTCTAGCC	480
AGCGAAGGGA	CCCGATGCAG	ACCTTCGCGG	CCATCAGGGG	CACGGTGGGG	TCCGAGGGCC	540
GCAACTTCAC	ACACTCCCGC	AGCAGGACAC	CAGCGTAGGC	TGAC		584

(2) INFORMATION FOR SEQ ID NO:216:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

GAATTCGGCC	AAAGAGGCCT	AGACCTGCCC	TAAAGATAGA	GTCTTGATGC	ACCGTCTACC	60
TTGTCCCCAA	CCAAGAGTGA	GTAGTGACAC	GAAGTCTCCT	GGCACCCTGG	GAATCCTGCA	120
TTTTTAATGG	ACGAGCAGGG	CAGGAAAGAA	AAAAAAAACC	CAAACCCCAT	CACCTCTGCCA	180
GCCCCTGTGA	CCAAAGCAGC	CCAAATCAGT	TACCTTGACA	ACTCTCATGC	ACAGACTGCA	240
CCAGCCTGTG	TTGCAAACAT	CACCTGCCCG	CTTCTAACAG	GAAGAGATAC	TCTTTTGGGG	300
GTCTTGACAG	GCCCAGGACC	AGAGCCCTT	CTACCCAGGG	CCCTTCCAAA	GGCAAAGCAC	360
AGAGTCACAT	TTGGGCGTGG	CATGAGAGGG	AAATAAAGAG	ATTGCTGTGT	AGTGGGAGGG	420
AGGTTTCAGT	GCTTTTCTG	GGGACATTGG	TGCCTATCTC	TATTCTGAGA	GTGTCTCTCC	480
TCATAGGACA	CCATAAATCG	CATCCAGGAC	CTGCTGGCTG	AGGGTACTCG	AG	532

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

GAATTCGGCC AAAGAGGCCT AGTGTGTCCG GGTCTTATAC AAAACAACA CAGTGAATGA	60
AGGAATAAAT ATTTATTGAA TGGAAAATCA GCAAAGGAAA AAATGTGATA ATTGTCAATG	120
ACAATGGGAA GCACATAGTG AGGCTATGAG TGATTTGGAA ATCATGAGCG TGCAGTGTTC	180
TGTTACGCA TTTCGGTTGT GTTTCAGAA AGTAAGTACA ACATAGCATC ATGTAGCAGA	240
ATTGCTGGT GTAAGCAAAA AGGCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 675 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

GAATTCGGCC AAAGAGGCCT AATTCCTTTT CTTTTAATT TGAAGAAAA TCATCAGTCT	60
TGGAATACAG AAGAGAACT AGAAATATAC GTATTTTGT TCACATTTGA ACAGTCATTC	120
TTGAGGAATA CTCCATACCT GAGTAGACAG CCATGTGGCC ATCGCAGCTA CTAATTTCA	180
TGATGCTCTT AGCTCCAATA ATTCATGCTT TCAGCCGTGC CCCAATTCCA ATGGCTGTGG	240
TCCGCAGAGA GCTATCCTGT GAGAGCTATC CTATAGAGCT TCGCTGTCCA GGAACAGACG	300
TCATCATGAT AGAAAGTGCC AACTATGGCA GGACTGATGA CAAAATTTGT GACTCTGACC	360
CTGCTCAGAT GGAGAAATATC CGATGTTATC TGCCAGATGC CTATAAGATT ATGTCTCAA	420
GATGCAATAA CAGAACCCAG TGTGCAGTGG TGGCAGGTCC TGATGTTTTT CCAGACCCGT	480
GTCCAGGAAC CTATAAATAC CTTGAAGTGC AGTATGAATG TGTCCTTAC ATTTTTCTTT	540
GTCCTGGACT ACTAAAAGGA GTATACCAGA GTGAACATTT GTTTGAGTCC GACCACCAAT	600
CTGGGCGTG GTGCAAGAC CCTCTGCAG CATCTGACAA GATTATTAT ATGCCCTGGA	660
CTCCCTACAG AACTG	675

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

GAATTCGGCC AAAGAGGCCT ACTCCCTGTT TTGAACAAGT TTTTGTGAGA ATTCTTAGTT	60
TTAGTTTTTG TTTAGCTTAC AACTGAAAA TTTTGAGAAG CATCTAAAAA AATCCACAAT	120
TAGTGCAAAA AGAGGGGACA ATACTTTAAG TCATTCCTTC TATAAAAAGA ATTAAGGTTA	180
CTAAATGCCA ATTTTAAAGC AAATATATAG TTTCTATTG GCCTTCTGAA AGACAGCAGA	240
TATAAAAATA GTTCAATATT AGGTTTAACA AGGTTTGAAC AACACATGTA CTATCAGCTT	300
TATTTTACCT GCAAAAATAT TTAGCTACA CTTGGAAAAA AATAAACTTG AGAATATAAC	360
TTACATTTT TAAGGCCAGA TGCAAGAATA CTTATTTAGG CCTCTTTGGC CGAA	414

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

```

GACCGTCGAT TGAATTCTAG ACCTGCCTCG AGATTGGAGA CAGAAGGTCC CGGGAGCAGA      60
AAGCCAAACA GGAGCGGGAG AAAGAACTGG CAAAAGTCAC TATCAAGAAG GAAACTCGAG      120

```

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

```

GAATTCGGCC AAAGAGGCCT AAGCAGCAGC TGCTTATATG CATGTGAACA GCTGGGGAAT      60
TAATTTGGTA TGCATTCTCA GGAGCCACTC ATCTGCTGGC AGAGGTAGCA GAAGAATGCC      120
CTTAGTGTA GTCCTCTACA ACCATACACC AAATGTGCTC CCTGCATTTC AAATTCCATT      180
GTAGAAAGTC TCTGATAATC TCACCTATAC CATGAGCCAT TCCTCAGTAT CTGTCCTCTT      240
CCTGTTAGTG TTCTACAATT CCTTTCTCCT TAATTTTCT CCGCTTTACA AAATGTCACA      300
CAGACAAAGTG CATAATACTT AAACAAGCTC GAG                                333

```

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

```

GAATTCGGCC AAAGAGGCCT AAGAAAAGCA CCCTTATTAA GAATTGCAGC AAGTAAGCCA      60
ACAAGGTCTT TTCAGGATGA TTTTCTTATA TCAAGTGGTA CATTTCAATT TATTTACTTC      120
AGTTTCTGGT GAATGTGTGA CTCAGTTGTT GAAGGACACC TGCTTTGAAG GAGGGGACAT      180
TACTACGGTC TTCACACCAA GCGCCAAGTA CTGCCAGGTA GTCTGCACTT ACCACCCAAG      240
ATGTTTACTC TTCACTTTCA CGGCGGAATC ACCATCTGAG GATCCCAACC CATGGTTTAC      300
TTGTGTCCTG AAAGACAGTG TTACAGAAAC ACTGCCAAGA GTGAATAGGA CAGCAGCGAT      360
TTCTGGGTAT TCTTTCAAGC AATGCTCACA CCAAATAAGC GCTTGCAACA AAGACATTTA      420
TGTGGACCTA GACATGAAGG GCATAAACTA TAACAGCTCA GTTGCCAAGA GTGCTCAAGA      480
ATGCCAAGAA AGATGCACGG ATGACGTCCA CTGCCACTTT TTCACGTACG CCACAAGGCA      540
GTTTCCCAGC CTGGAGCATC GAAATCTTTG TCTCCTTAAA ACATCTGAGA GTGGATTGCC      600
CAGTACACGC ATTAAAAAGA GCAAAGCTCT TTCTGGTTTC AGTCTACAAA GCTGCAGGCA      660
CAGCATCCCA GTGTTCTGCC ATTCTTCATT TTACCATGAC ACTGATTTCT TGGGAGAAGA      720
ACTGGATATT GTTGCTGCAA AAAGTCACGA GGCCTGCCAG AAAGTGTGCA CCAATGCCGT      780
CCGCTGCCAG TTTTCTACCT ATACCCAAC GCTCGAG                                817

```

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 587 base pairs

- (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

```
GAATTCGGCC AAAGAGGCCT AGGAGATACA TCATCATATC ACGGAAAGAG ATGCAGATAG      60
ATCTTTGACC ATACTTGATG AACAGTTATA CTCATTTGCG TTTTCCACCG TGCACATTAC      120
GAAGAAAAGA AATGGAGGTG GGAGTTTAAA TAACTATTCC TCCTCCATTC CATTGACTCC      180
CAGCACCAGC CAGGAGGACC TTTATTTTCA TGTTCCTCCC ACTGCCAACA CACCCACGCC      240
CGTTTGCAAG CAGTCCATGG GCTGGTCCAA CCTGTTTACA TCTGAGAAAG GGAGTGACCC      300
AGACAAAGGG AGGAAAGCCC TGGAGAGTCA CGCTGACACC ATCGGGAGCG GCAGAGCCAT      360
CCCCATTAAA CAGGGCATGC TCTTAAAGCG AAGTGGGAAA TGGCTGAAGA CGTGGAAAAA      420
GAAATATGTC ACCCTGTGTT CCAATGGCGT GCTCACCTAT TATTCAAGCT TAGGTGATTA      480
TATGAAGAAT ATTCATAAAA AAGAGATTGA CCTTCGGACA TCTACCATCA AAGTCCCAGG      540
AAAGTGGCCA TCCCTAGCCA CATCGGCCTG CGCACCCATC TCTCGAG      587
```

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

```
GAATTCGGCC AAAGAGCCTA AGTAGTTGCT GCCTTCTTTC AGATCAGGTT ACCACAATGC      60
CTCCCCGCTG CTGACGCTTC ATCCCCCACA CCTCCAGCCC CAGTTACCTG GAGCTTCTCA      120
GAACCCACTT TGCCGGTGCT AAAACACAAG AGGGGGTGAA AGTGGCTGCC AGTAATGGCC      180
AGAAACCAAC CACCAGAGGC CAGGCTGAAA GACAAGCTCC GGGTGTCAG GGGCTGACGG      240
GCCAACCATG TGGCAGGTCC CAGGCCCCAC CCACTGCGCC ATCCGTCTCT GAGCTCCACA      300
GTGGTCCAC TAATGGGAAC CTCCTCTAGG GAGAGTGATA CTGCACCTTC ACCCGTAGGA      360
CTCATATTTA TAACAATGTG TAATGGCTGT AGCAAAAAGC CCTTGTTTCT AGATGTAAAT      420
GGTCAAAGAA ACAAGCGCTC TATTGTTTGG AATAAAATAG TTCAAATGAG TCCTGTATCA      480
TTGTATCTCC TATTCTGGAT TAGTGCCTTT TGGACAGTAG ACTGTAACTT CGAG      534
```

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

```
GCTCCACTCT CTCCCTATCC ATTTGTAAGA ACAGGCTCCC CTCGCCGAAT ACAGTTGTCT      60
CAAAATCATC CTGTCTACAT TTCCCACAT AAAAATGAAA CAATGCTTTC TCCTCGAG      118
```

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

```

GAATTCGGCC AAAGAGGCCT AAATTTTAGT AGAGATGGAA TTTCACCATA TTGCCAGGC      60
CGGTCTCAAA CTCTTGACCT CAAGTGATCT GCCCGCCTCG GCCTCCCAAA ATGTTGAGAT      120
TACAGGCGTG AGCCACCATG CCTCTCTTAC ATTCTTTTCT TCTGTTCACT ACAGCCGTGG      180
AGAGCTCCGG GTTGTCTGTC ACATGTGCAC TGCCTCTCTT TTTATGGACC TTTTAGGCTG      240
GCTGCACCCT CCGTCTGTGT CACCCTCCTG CTCCTCCTCC ACCTGGCTAG TTCCTGTTGG      300
CCACTTTTGG AAATTCATGC CAGTCCAGTC CACCCTGAGT ACATCCTCTT TCTGTGTAC      360
TGAGCTCACT ATGCTGGGTT TTATCTATGT CTCCTCGCA ACTAGATCAT TCACGTCTTG      420
AAGTTAGGCA TCATGCGTTC TTCATTCTG TACCTCCCAA CTCATGCTT AGCACCAGC      480
AGGGGCTCAA GACTGTGTGT GGAATGAAGG ATTCTGTGTA AAATGCAGGG AGATGGAAGG      540
CTGAGCGTTT CTGTTCTCTG ACCATTCCCG GGTGGCTCG AG                          582

```

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

```

GAATTCGGCC AAAGAGGCCT AAAAATTAT AAATAAGTGA GACTACTGCC CCCTAGCCTA      60
AAATTCATTC CCTGCGCTCA CTCAACATCA TAGTTCTTTA GGAAGACAAG TTGTTCTATA      120
GCATAAAGAT ACAACCTATT TAGATAGTCT AAAGATTCTC CTCTGTTTCT CAAATACAGT      180
CAGTTATGCA GCTCAAAATG CCTCTCATTT TCCTGCTTTT TTTTCTTCTA CTATTGTGTC      240
CTCCAGGCTT TGCAGAAACA CATGTTATTC TCCCCTTAAA ATCTGTTTCT CTTCTAGTTT      300
TCTCTCTGCC AGCAATGGCA CCACACAGTC TTTTGGTTTT GCACCAGAGA ATTAGAGATG      360
AACCCCTCAT CTCTAATCTA TCACAAGTTT CCTCAGATT AAACCTCTCA ATCAAGATGT      420
TTCTCACCAT TTCCATTACT ATTGTCCCCA GCTTTCTCGA G                          461

```

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```

GCCTAAACCG TCGATTGAAT TCTAGACCTA TCTCGAGAAA GAGTTGTTCT GGAAAGAAAT      60
GAAGAAAAGA GCAGAACCAA TCTCAAGCAG CCAAGTGGTG AAGTTGGATG TATGTGACCC      120
TACGTCTCTC GAG                          133

```

(2) INFORMATION FOR SEQ ID NO:229:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```
GAAAGGGATC AAAAAGAAAA AGTGATCGAA TGGAACTCTAC TGATACCAAA CGACAAAAGC      60
CTTCTGTCCA TTCAAGACAA CTGGTTTCTA AGCCACTGAG CTCATCTGTT AGCAATAACA      120
AAAGAATAGT TAGTACAAAA GGAAAGTCAG CCACAGAGTA TAAAAATGAG GAATATCAAA      180
GATCTGAAAG AAACAAGCGT CTAGATGCTG ATCGGAAAAT TCGTCTATCA AGTAGTGCCT      240
CCAGAGAACC TTATAAGAAT CAACCTGAAA AAACCTGTGT CCGGAAAAGG GATCCTGAAA      300
GGAGGGCCAA ATCTCCTACG CCAGATGGTT CTGAGAGAAT TGGGCTTGAA GTGGATAGAC      360
GTGCAAGCAG ATCCAGCCAG TCTTCTAAGG AAGAAGTGAA CTCTGAAGAA TATGGCTCTG      420
ACCATGAGAC TGGCAGCAGT GGTTCCTCTG ATGAGCAAGG GAACAACACT GAAAATCTCG      480
AG
```

(2) INFORMATION FOR SEQ ID NO:230:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 501 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```
GAATTCGGCC TTCATGGCCT AGGGGATAAA TGTAAGCTTG TTAAAGTAAG CACCACACCA      60
TGTTTCTGTC TCCCCAGCAC CCAGCACAGT GCTGTGAACC TTGGCAGATG CTAGATAAAT      120
GTGTGTTGAA TGAATGTGCC TATGAAGCCA CAAAGATGCC ACATGTTAGT ATATCAGTGA      180
GAGGTGACTC CACAGTGCTC TCTGGAGAAG CAATATGAGT GACTGAAGAG TGGGGCCTTT      240
TGCTTTTGCC TGGATATAGG GGTGCTCTTC TACTGTAATT GGGTGTGGAA AAACCTCTGGC      300
TTTATGGTAT TCATTAGGT TCTTTTCATT TAAAGTAGTC TTAAATCAAA AGTATCCAAT      360
ATTTTAAAGC CACAAAGTAG ATTACATAAT TAGCAGAGAT TTTAGTCAGT AAAATGTTAG      420
AAATCAAACAT ATAAGAAAAT TCAAGTCCTT TATTTTGTGT CTTGGGTATA TGTCAATTAT      480
TTAAATTCCA CAGCTCTCGA G
```

(2) INFORMATION FOR SEQ ID NO:231:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```
GAATTCGGCT TCGATTGAAT TCTAGGACTT GACAGAATTC GAGTTATCCT TCTCAGAACA      60
TGTGCAGAGT CTCTTTTTGC CTCACCATGT GGTCCTGTGC TCTTTCAGGT GGGAGTTTTG      120
GGGCCTCCAG GGCAGCAGGC ACCACCTCCA TATCCCGGCC CACATCCAGC TGGACCCCTT      180
GTCATACAGC AGCCAACAAC ACCCATGTTT GTAGCTCCCC CCCAAAGACC CAGCGGCTTC      240
TTCATCAGA GGCCTACCTG AAATACATTG AAGGACTCAG TCGCGAGTCC AACAGCATTG      300
```

GCAAGTGGGA TCAGAGCAAT CTCGAG

326

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

GAATTCGGCC	TTCATGGCCT	AATCAGAAGC	TTTTCAAAAT	TCCGTCTTCA	AGAAGAAACA	60
CCCGTGGAGG	AAGAAGACAT	TATACAAAAC	AAATTTAGAA	ACTGGGATCA	TGAGTGGAAA	120
AACAAAGGCA	AGAAGGGCTG	CCATGTTTTT	TAGACGTTGC	TCTGAAGACG	CCAGCGGTAG	180
CGCCAGTGGC	AATGCTTTGT	TATCAGAGGA	CGAAAATCCT	GATGCGAATG	GGGTAACTCG	240
ATCATGGAAG	ATTATTCTAA	GTACAATGCT	TACACTGACT	TTTCTTCTTG	TAGGACTCCT	300
AAATCATCAG	TGGCTTAAAG	AAACAGATGT	TCCTCAGAAA	TCCAGACAAT	TATATGCCAT	360
GCTCGAG						367

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

GAATTCGGCC	TTCATGGCCT	AAAGAAGAAT	TGACACCTCT	TGGAGTCCAC	TTGGCAGCAT	60
TACCCGTGA	GCCACATATT	GGAAAAATGA	TTCTTTTGG	AGCACTGTTT	TGCTGCTTAG	120
ACCCAGTACT	CACTATTGCT	GCTAGTCTCA	GTTTCAAAGA	TCCATTGTTC	ATTCCACTGG	180
GAAAAGAAAA	GATTGCAGAT	GCAAGAAGAA	AGGAATTGGC	AAAGGATACT	AGAAGTGATC	240
ACTTAACAGT	TGTGAATGCG	TTGAGGGGCT	GGGAAGAGGC	TAGGCGACGT	GGTTTCAGAT	300
ACGAAAAGGA	CACACTCGAG					320

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

GAATTCGGCT	TCATGGCCTA	CGATGAGGCT	GCTGTCATT	GTGGTGTGG	CTCTATTGTC	60
TGTCACTCAA	GCAGAGGAAG	GAGCCAGGCT	TTTGGCTTCC	AAATCACTGC	TGAACAGATA	120
CGCCGTGGAG	GGACGAGACC	TGACCTTGCA	GTACAACATC	TACAATGTTG	GCTCAAGTGC	180
TGCATTAGAC	GTGGAACAT	CTGATGATTC	CTTCCCTCCA	GAAGACTTTG	GCATTGTGTC	240
TGGAATGCTC	AATGTCAAAT	GGGACCGGAT	TGCCCTGCT	AGCAATGTCT	CCCACACTGT	300
GGTCCTGCGC	CCTCTCAAGG	CTGGTTATTT	CAACTTCACC	TCGGCAACAA	TCCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGGCT TCATGGCCTA GTTGTACGTA ATGTATTTAT ATGTTAATTT GTTATGTATA      60
TAGATGTGCA AGTCTTGTC GAATTGGCCT CAGTGTAGTT AAAGGGCAGA AGGGAAGAT      120
ACTGACTAGT CATAGAAATA CCTCATTCGC CTGTGGGAAG AGAAGGAAG CCTCTTCAGG      180
GTGAGTGAAT GGCAAAGCGG TTGCTTCTGG CTCCTCCTTC CCCTGTGGTC TTGGAAGTGT      240
GTGGAAGGCA GGGACAGAGA TGGAGGCCGA GCCAATAGAC TGAAGAGACC ACAGCAATTG      300
GCTCCTCCAT CTAGAGATTT TCTTGGCAGT ATTCCATGGG ATGTTAAGCA AAGGAAACCA      360
AAGGAATCGT TTCAAATGGA CTCATGGCTT AGAAATCTTT ATTCTTAGGG CAGTCAGTAG      420
TATTCTAAAG CTTTCTGACA AGATAAGGA AGTCACCAA ATTTCTTTTT TTAATTTGTA      480
TCTAATCCTC AACAACAAAC CAAACTCTC GAG                                     513

```

(2) INFORMATION FOR SEQ ID NO:236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT ACTTGGAAT GTTTGATGCT ACTCTGAAAG ATCGAGAACT      60
GAGCTTTTCAG TCGGCTCCAG GTACTACCAT GTTCTGTCAT TGGCTAGTGG GAATGGTATA      120
TGTCTTCTAC TTTGCCTCCT TCATTCTACT ACTGAGAGAG GTACTTCGAC CTGGTGTCTT      180
GTGGTTTCTA AGGAATTGGA ATGATCCAGA TTTCAATCCA GTACAGGAAA TGATCCATTT      240
GCCAATATAT AGGCATCTCC GAAGATTTAT TTTGTCTAGT ATTGTCTTTG GCTCCATTGT      300
CCTCCTGATG CTTTGGCTTC CTATACGTAT AATTAAGAGT GTGCTGCCTA ATTTTCTTCC      360
ATACAATGTC ATGCTCTACA GTGATGCTCC AGTGAGTGAA CTGTCCCTCG AG          412

```

(2) INFORMATION FOR SEQ ID NO:237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

```

TTCATGGCCT AGAGATATGC TTCTTTGTAC CAATATGGAA AATCTAAAAG AAAAAACCCA      60
CACTCAGCAC TATGAATGTT ATAGGTACCA AAAACTGCAG AAAATGGGCT TTACAGATGT      120
GGGTCCAAC AACCAGCCAG TTAGTTTTCA AGAAATCTTT GAAGCCAAAA GACAAGAGTT      180
CTATGATCAA TGTCAGAGGG AAGAAGAAGA GTTGAAACAG AGATTTATGC AGCGAGTCAA      240
GGAGAAAGAA GCAACATTTA AAGAAGCTGA AAAAGAGCTG CAGGACAAGT TCGAGCATCT      300

```

TAAAATGATT CAACAGGAGG AGATAAGGAA GCTCGAG

337

(2) INFORMATION FOR SEQ ID NO:238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 750 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

```

GAATTCGCGC ATTCTGGTACA ACAAGAGAGA TAAACGATGA AACCGTTACA TTATACAGCT      60
TCAGCACTGG CGCTCGGACT GGCCTTAATG GGAATGCAC AGGCAGTGAC GACCATTCCG      120
TTCTGGCATT CTATGGAAGG GGAAGTGGT AAAGAGGTGG ATTCTCTGGC CCAACGTTTT      180
AACGCCGAAA ACCCGGATTA CAAAATTGTA CCGACCTATA AAGGCAACTA CGAACAGAAT      240
TTAAGCGCGG GGATTGCCGC ATTTCTGTACC GGCAACGCGC CGGCTATTTT GCAGGTTTAT      300
GAAGTTGGCA CCGCCACCAT GATGGCGTCG AAAGCCATTA AACCGGTGTA TGACGTGTTT      360
AAAGAGGCAG GGATTCAGTT CGATGAGTCG CAGTTTGTGC CGACGGTTTC AGGTTACTAC      420
TCCGACAGCA AAACGGGCCA CTTACTCTCC CAGCCATTCA ACAGCTCGAC CCCCGTTCTC      480
TATTACAACA AAGACGCCCT CAAGAAAGCA GGATTAGACC CGGAACAGCC GCCGAAAACC      540
TGGCAGGATC TGGCGGACTA TGCCGCGAAA CTGAAAGCCT CCGGCATGAA GTGCGGCTAC      600
GCCAGCGGCT GGCAGGGCTG GATCCAACTG GAAAACCTTA GCGCCTGGAA CGGTCTGCCG      660
TTTGCCAGCA AAAACAACGG CTTTGACGGC ACGGACGCGG TGCTGGAGTT CAATAAGCCG      720
GAGCAGGTGA AACACATCGC CATGCTCGAG      750

```

(2) INFORMATION FOR SEQ ID NO:239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 490 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

```

GAATTCGGCC TTCATGGCCT ACTTACAGAA CCTATTCACT GGAAGGAAG CCCTCATTAT      60
AATGATTTTC ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTGAG AAGAGGATTA      120
TTATACACCA CAAAAGGTGG ATGTTCCCAA GGCCTTGATT ATTGTTGCAG TTCAATGTGG      180
CTGTGATGGG ACATTTCTGT TGACCCAGTC AGGCAAAGTG CTGGCCTGTG GACTCAATGA      240
ATTCAATAAG CTGGGTCTGA ATCAGTGCAT GTCGGGAATT ATCAACCATG AAGCATACCA      300
TGAAGTTCCT TACACAACGT CCTTTACCTT GGCCAAACAG TTGTCCTTTT ATAAGATCCG      360
TACCATTGCC CCAGGCAAGA CTCACACAGC TGCTATTGAT GAGCGAGGCC GGCTGCTGAC      420
CTTTGGCTGC AACAAAGTGT GGCAGCTGGG CGTTGGGAAC TACAAGAAGC GTCTGGGAAT      480
CAACCTCGAG      490

```

(2) INFORMATION FOR SEQ ID NO:240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

```

GAATTCGGCC TTCATGGCCT ACTTCTGGAC TCTATAGAAC CCACTGCCTC CTGATGAAGT      60
CCCTACTGTT CACCCTTGCA GTTTTATGTC TCCTGGCCCA ATTGGTCTCA GGTAATTGGT      120
ATGTGAAAAA GTGTCTAAAC GACGTTGGAA TTTGCAAGAA GAAGTGCAAA CCTGAAGAGA      180
TGCATGTAAA GAATGGTTGG GCAATGTGCG GCAAACAAAG GGACTGCTGT GTTCCAGCTG      240
ACAGACGTGC TAATTATCCT GTTTTCTGTG TCCAGACAAA GACTACAAGA ATTTCAACAG      300
TAACAGCAAC AACAGCAACA ACAACTTTGA TGATGACTAC TGCTTCGATG TCTTCGATGG      360
CTCCTACCGG TTTCTCCAC TGGTTGAACA TTCCAGCCTC TGTCTCCTGC TCTAGGATCC      420
TCGAG

```

(2) INFORMATION FOR SEQ ID NO:241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

```

GAATTCGGCC TTCATGGCCT AACCAGAACT AATTGCTAA GTCTTTTGT TAGTCCTGCA      60
AGACTGATGC TTAATACACA GTCTGTTCTC CTGTGTCTAG GTCAGGAAC CCAGTTTGCT      120
TTTCTGTTTT GTGTCCTGGT AGCAGCTGTT GAGTAACTTT CATGGAGGT TGGGAAGGAA      180
GTGAGGAGAA AGTGTCTTG TTTAGTGTG TATTTCCTAT AATAGGATGC TGCCTAACCC      240
AGTTCATCTC TATGTCCGTG TCACTGAATA TTCCGGGTAA TTGAAAGAAA ATATAATGGA      300
TGGGCTCCAT TAAAACCAGC TCAAAAATAA ATTCTTGTC GTAAAGATT CTGTCAAGA      360
TGTCTTGAT TGCACTTTG TTGAGGAAAG ACAGTGTAAG TAGTTAAAGA ATGTTGATAA      420
AATTGAAACA TTTGGTTGTG GAATTGTGTG TGGTACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

```

GAATTCGGCC TTCATGGCTT ATGGACAAGG AAGCATTCAG AGCATGGTGT CATCTGACTC      60
CACATCACCA GATTCTTCTT TAACAGAAGA ATCAGGTTCT GAGACAGCCA GTAGTTTATC      120
CCAGAAGATT TGTAAATGGGG GATTATCTCC TGGTAACCCA GGAGATTCTA AGGACATGAA      180
GGAAATTGAG CCCAATTATG AAAGTCCCTC TAGTAATAAT CAGGATAAAG ATTCATCACA      240
GGCTTCCAAA AGCTCAATAA AAGTTCCAGA GACCCACAAA GCAGTCCTTG CTCTCCGATT      300
AGAAGAGAAA GATGGCAAGA TTGCTGTACA AACTGAGAAG GAAGAAAGTA AAGCCTCTAC      360
AGATGTTGCT GGGCAAGCAG TAACCATAAA CCTTGTCCTC ACAGAAGAGC AAGCAAAACC      420
TTACCGAGTT GTGAACCTGG AACAGCCATT GTGCAAGCCA TATACTGTGC TGGATGTGTC      480
AGCAGCCATG GCCAGTGAGC ACCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

```
GAATTCGGCT TCATGGCCTA GGTTCCTGT ACATGGAGAT TAAACTGTCT TCCAAAGTGA      60
AGAGTTTATT GTTCTAGATC TTGAGCACAA AGGTTGGTAT ACGTTAATAA AAAAAATAGC      120
AAGGGAAGAA AATCATTTCC TTCATACCAA GTAAGAGAGC ACTTATCATG GTAGGCACTG      180
GCTTTGCAAT TATGAGACCA GTAGTAGAAA TAGCTTTAGT TTCCTCAATT TTCCTGGAGT      240
ATTCTTCAGA CTTTCTTTAC ACTGCTCAAG GTGGGGCGAG TGGCAGGGCG GACCTTGGCG      300
ACCTGACGCT GCGGAGGCTC GAG                                         323
```

(2) INFORMATION FOR SEQ ID NO:244:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 396 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

```
GAATTCGGCC TTCATGGCCT AGCTTCAGTA GCAAATAAGG ACATCATCTG CTATAACCTA      60
CAAGCAGTTG GACAGATATT CTACATTTC TCATTTCTCT ACACCGTCAA TTACATCTGG      120
TATTTGTACA CAGAGCTGAG GATGAAACAC ACCCAGAGTG GACAGAGCAC ATCTCCACTG      180
GTGATAGATT ATACTGTGCG AGTTGGTCAA ATGGCCTTTG TTTTCTCAAG CCTGATACCT      240
CTGCTATTGA TGACACCTGT ATTCTGTCTG GGAAATACTA GTGAATGTTT CCAAAACTTC      300
AGTCAGAGCC ACAAGTGTAT CTTGATGCAC TCACCACCAT CAGCCATGGC TGAACCTCCA      360
CCTTCTGCCA ACACATCTGT CTGTAGCACA CTCGAG                                         396
```

(2) INFORMATION FOR SEQ ID NO:245:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 370 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

```
GAATTCGGCC TTCATGCTTA GCCTCAGCTC TTTCTTCTGG GTTGTGTTGTA TTTCTTTTC      60
TGTCCCAAAC AGTTTCCCCC ACAAAGAGAA CTTTATGTCT TTCTCTGTCT TCCCTCAGTC      120
CTTCCAGTCA GCAGCCTGTG ATTGGGCTTT TCCCTCAGA AACGAACAAT CCAGAACCCA      180
CTGTTTAAAA CAACTGTATT TTGCCTTGGG AAGTCCCATT GCCTTCCCTG AAAACATTAA      240
ACATTCTCTC GATCCCCAGC CTGAGTCTCT CTGTCTCTGG GCCCATCCT GCTCCACAGC      300
AGGGCTGGTG TGTCCAGCAC AGAGTGACCC TCCGATGCC TTTCCACCC GCCGCTCTGC      360
CTCCCTCGAG                                         370
```

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 367 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

```
GAATTCGGCC TTCATGCCTA GAGAACTTGA AGCTTTGCGG CAGGAATTTA AAAAGAAAGA    60
CAAGACGTTG AAAGAGAATT CCAGAAAGTT GGAGGAAGAA AATGAGAATC TCCGAGCAGA    120
GCTACAGTGT TGTCTACAC AACTGGAATC CTCTCTCAAC AAATACAACA CCAGCCAGCA    180
AGTCATCCAA GACTTGAATA AAGAGATAGC CCTTCAGAAAG GAGTCCTTAA TGAGCCTGCA    240
GGCCCAGCTG GACAAAGCTC TGCAGAAGGA GAAGCACTAT CTCCAGACTA CCATCACCAA    300
AGAAGCCTAT GATGCATTAT CCCGGAAGTC AGCCGCCTGC CAGGATGACC TGACACAAGC    360
CCTCGAG                                           367
```

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

```
GAATTCGGCC TTCATGGCCT ACGGCTTCAT AGTAACTCTT TGCCATATCT CTAGCCAGCT    60
GCATAAAACG TTCGCCATCA GATGGAGACA AAAGGTTTAA AATACGCCTA TAACCATCCA    120
TGGCCATTTT ATGATCACCC ATCTGTTCAT AAAGGCTTGA TCGCTCCCAC AGATAACGGA    180
CATTAGTAGG TTCATATTTA AGAGCTTTTG TATAGCAAAA AATAGCCTGC TTAATATTGT    240
CTTGTTCAG AGACATTCTC GCCAGTCTAA CCCATTCTTC TGTGTCACTG GGATTTAAAT    300
GCGCAGCAAT CAACTCAAAC TGCAATGATT TTCCATGTC ACCTTGGTCC TCATATATCA    360
TGGCTAGAGT AGAGAATGGC TCATAAGCCA GAGGAGCTTG TCTTATGATT TCCATGCACA    420
TCAATATCGC CTCTTCACGT TCTCCTCGAG                                           450
```

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 408 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

```
GAATTCGGCC TTCATGGCCT AACGAACTG ACGTCTACCT CATGGGGCTG CTGTGTGGGT    60
TTGGGAGGCA AAAATCTATG AAGGGTTTTT TGAAATCCCA TAGGTGCCAC ATCTATGAGA    120
TGTTTGATAA ATGTGAATAT GCTTTTACAT TTGGGCTTAT CTAATTTGCA ATAAGAGAGC    180
CTCTCTCTAT CAACACCAGC TTCTCTCTCG GGCTGTTTGC TCAGGGAAGG CAAGAAAGCC    240
ACGTGCTGGC CCTCTGCCTT CTCTAAAGTG CTGTTGGAGC ATGGAGGAGC TGGAGGAGAT    300
GGGGATGGAC TGACAGCTAA GAGGGCGGCT GCTGGGACTA GATAGTGGAT GAAGAAAGAA    360
GGACGAGGAA GCCGTGGGC AGCCTCTTCA CATGGGACG AACTCGAG                                           408
```

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 562 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

```

GCCCATGACA GAGAGCAGTG CCAAAGACAT GCGGTACGAA CATCTGATAG ATGACTTATT      60
GGCTGCTCAG AAGGAAATTC TGTCTCAGCA GGAAGTCATC ATGAAGTTAA GGAAAGACCT      120
TACCGAAGCC CACAGCAGAA TGTCGGATTG GAGAGGGGAG CTAAACGAGA AGCAGAAGAT      180
GGAAGTGGAG CAGAACGTGG TGCTGGTCCA GCAGCAGAGC AAGGAGCTGA GTGTGCTCAA      240
GGAGAAGATG GCCCAGATGA GCAGCCTGGT AGAAAAGAAA GATCGGGAGC TGAAGGCCCT      300
TGAGGAGGCA CTCAGGGCTT CCCAAGAGAA ACACAGACTC CAGCTGAACA CAGAGAAGGA      360
ACAGAAGCCC CGGAAGAAGA CCCAGACGTG TGACACCTCT GTGCAGATAG AACCCTCCA      420
CACTGAGGCC TTCTCCAGCA GCCAAGAGCA GCAATCCTTC AGCGATCTAG GGGTCAGGTG      480
CAAAGGTCC CGGCACGAGG AGGTCATTCA GCGTCAGATA AAGGCCTTAT CTGAAGTTCG      540
AGCGCGAATT AAAGAACTCG AG                                     562
  
```

(2) INFORMATION FOR SEQ ID NO:250:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

```

GAATTCGGCC TTCATGGCCT ACCCAAACAG ACAGAAAACG CCACGAGGCA AGTGTAGTCT      60
CTCACAGCCT GGACCCTCTG TCAGCAGTCC ACATAGCAGG TCCACAAAAG GTGGCTCCGA      120
TTCCTCCCTT TCTGAGCCAG GGCCAGGTGG GTCCGGCCGC GGCTTCCTGT TCAGAGTCTT      180
CCGAGCAGCT CTTCCCTTTC AGCTTCTCCT GCTCCTCTC ATCGGGCTTG CCTGCCTTGT      240
ACCAATGTCA GAGGAAGACT ACAGCTGTGC CCTCTCCAAC AACTTTGCCC GGTCAATCCA      300
CCCTATGCTC GAG                                     313
  
```

(2) INFORMATION FOR SEQ ID NO:251:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

```

GTCTTGACAA AACCTAACTT GCGCAGAAAA CAAGATGAGA TTGGCATGGC TTTATTTGTT      60
TTTTTTGTTT TGTTTGGTT TTTTTTTTTT TTTTGGCTTG ACTCAGGAGA TCCCTCCCGG      120
GGGCTCCCGC CGGCTTCTCC GGGATCGGTC GCGTTACCGC ACTGGACGCC TCGCGGCGCC      180
CATTTCCGCC ACTCCGATT CGGGGATCTG AACCCGACTC CCTTTCGATC GGCCGAGGGC      240
AACGGAGGCC ATCGCCGTC CCTTCGGAAC GCGCTCGCC CAACTCTCGA G                                     291
  
```

(2) INFORMATION FOR SEQ ID NO:252:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 384 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

CGGGAAATGA AGCGGAAGCA GCGGAGTCC GAGAGGCCCA TCTTGCCAGC CAATCAGAAG	60
CTCATTACTT TATCAGTGCA AGATGCACCC ACAAGAAAG AGTTTGTAT TAACCCCAAC	120
GGGAAATCCG AGGTCTGCAT CCTGCACGAG TACATGCAGC GTGTCCTCAA GGTCCGCCCT	180
GTCTATAATT TCTTTGAATG TGAGAACCCA AGTGAGCCTT TTGGTGCCTC GGTGACCATT	240
GATGGTGTGA CTTACGGATC TGGAACTGCA AGCAGCAAAA AACTTGCAGG GAATAAAGCT	300
GCCCCAGCTA CACTGGAAAT CCTCATCCCT GACTTTGTTA AACAGACCTC TGAAGAGAAG	360
CCCAAAGACA GTGAAGAACT CGAG	384

(2) INFORMATION FOR SEQ ID NO:253:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

GGGACGTTGG TGTTGAGGTT GGCATACGTA TCAAGGACAG TAACTACCAT GGCTCCCGAA	60
GTTTTGCCAA AACCTCGGAT GCGTGGCCTT CTGGCCAGGC GTCTGCGAAA TCATATGGCT	120
GTAGCATTCG TGCTATCCCT GGGGGTTGCA GCTTTGTATA AGTTTCGTGT GGCTGATCAA	180
AGAAAGAAGG CATACGCAGA TTTCTACAGA AACTATGATG TCATGAAAGA TTTTGAGGAG	240
ATGAGGAAGG CTGGTATCTT TCAGAGTGTA CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:254:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 497 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

GAGTTTGTG GGCTTACCTT ATTTTAATTA AAAAGAAGTC GGGGCTACCA GGGGTTTCAG	60
ACGTGCTCGA TGGACACGTG ATTTGTAAAC AGCCAAGATT CTGGGGGACG GGGGGGTGCC	120
TCGGTGGGGT TGACATTTGA GTTACAGGGA CTTAATAATG GCCAGCCTTT CACATCCCAT	180
GGGAAACCGC CCCCCGGGC CTTGGAGAAT GGGGGTCCAA GTGCTATACC CCCTTTGGAT	240
GTAAATTC A TCGTTAGTAA ACATCATCCG CCCAGCAACA AGCAAGCAC ATCGCAAGAT	300
TAAAACAAAG AATCCGCCGT GAACAGAAGG CCTCCATCTC TGCTCTCAGG CAGGTGTCCT	360
TCAGGGAGGA GCCTCAGGCA GCTGTTCTAA CCCTGCTGCC AACGCCTGGG CTGTTTCTGC	420
CGACAATCTT CTATTCTCT AAAAGAGTAC GCTGAACAGC TGGCTCTGCG TTGATTGAAT	480
TCTAGACCTG CCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:255:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 470 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

```
GAATTCGGCC TTCATGGCCT AGAGAACCGT TGCTTTTCCG AGTTGCTCTT CTCCAGGCT      60
CCGTTGGTGG TCGGCATGGC CCGTGGAAAT CAACGAGAAC TTGCCCGCCA GAAAAACATG      120
AAGAAAACCC AGGAAATTAG CAAGGGAAAG AGGAAAGAGG ATAGCTTGAC TGCCTCTCAG      180
AGAAAGCAGA GGGACTCTGA GATCATGCAA GAAAAGCAGA AGGCAGCTAA TGAGAAGAAG      240
TCTATGCAGA CAAGAGAAAA GTGATGACTG GCTATTTGGA AAACCTGGGT GCTACTGCCA      300
ACTGGGTGTA TCATAAGCTC TAAGATCAAG ATTTTGTTGA GTGGACAGTC ATTACATATG      360
TTATAACTTA TCCTTTAAAA ACTATTTTAA ACTTTATCCT TTCAGCTTTA CTTAGTGCGA      420
TGTTTTAGAA GCAGTCTTCA AAGAATAAAA CACTAACCAT GCTGCTCGAG      470
```

(2) INFORMATION FOR SEQ ID NO:256:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 388 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```
GAATTCGGCC TTCATGGCCT AATTTTGTAT TTTTAGTGGA GACGGGGTTT CTCCATGTTG      60
GTCAAGCTGG TCTTGAACTC CCAACCTCGG GTGATCCGCC CGCCTGGCC TCCCAAAGTG      120
CTGGGATTAC AGGCGTGAGC CACCGCGCCT GGCCAGTAGT TTCCTAACAT TAAATTATCC      180
GCAAAATGGA AGAAATACTA GAGGTCTGTG AGGATGTTT TCTCTTTCA GTCTGTTGTG      240
GTGTTTGTG GTTTACAGGG GCTTGGGTAA CTGGATTTT AGGTTTATTA TTTTAAATAG      300
TAGACTCAAC ACTATTTTGT ATTGCAGTAG AGATCACTTA TGCAGATCTT TTTAATACCA      360
TTTCATAGAG ATTAAGGGTC ACCTCGAG      388
```

(2) INFORMATION FOR SEQ ID NO:257:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```
GAAACAGGGC TCAAAGAAGT GGTAAGTCT GTGGAGGAAA TGACAAGTAA AGGAAAACCA      60
GGACAAGAAG TCTTGGAAGA CGACCAGGAA AATACTTTAA AATATGAGTA TGAAGAAGAC      120
TTTGAAGTAG ATGAGGAGAA ACAAGGTGAA AAATCTAATG AAGAAGGACA GGCTGATGTT      180
CAAATGAATG GAATACCGCA GTCACCTTTG GATGATAAAA AAGATAATTT AGACCCTGAA      240
AAAGAGAGTG AAACCTCATC ACAGAAGGCA CCAGATGCCC GTGACAATGT GAAAGATGAG      300
AATGATGGAT GCTCTGAGAG TGAACGTCTC GAG      333
```

(2) INFORMATION FOR SEQ ID NO:258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```

CACAGTGCTG GNTCACAACA AGATGNTCNA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC      60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC      120
GGACGGCGGT AATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA      180
GGAAGTCGGA CAGTGAACA AATTCCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG      240
AAAACCCTTC GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAAATGTAG      300
TCGCCATAAA GTATGCATTG CTCAAGATTG TCAGACTGCA GTCTGCATTA GTCACCGGAG      360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT      420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCCAGCCCT GTTTGTGGTT CAGATGGTCA      480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT      540
CGAG

```

(2) INFORMATION FOR SEQ ID NO:259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```

GAATTCGGCC TTCATGGCCT ACATCAGCAT CCCTGGGAGC ATCAGAAATG CAGAGCTCAG      60
GCCCGCCCCG GAGCTACCGA ATCAGAACCT ACATTTTACA CACCCCTCAG CTCAGAGCTT      120
GTTTCTCCCT GGATTCCATG GCCCTGTGCT GCTGGCAGCC CGGGGTTAGG GCATTTGTTT      180
GTCACCTGGC GACGGTGAAG CCTAGTTTCC TCCAGAGAGA TTATGCTGCT CTCCATCCAA      240
GTGAAGTGGC AATGGTGCCA GCCTGAGATT TCTGCCCTGA GTTTTAAGTA CGAGAGTGTG      300
GGCTGACAAT AAACCTCCTT ATTCTACCCT CTTCTGTTCT CATAAGGAGA AATTTAAATT      360
CTGGAAGAGA TGAAGCTTGC ATTTACCCAA GAC

```

(2) INFORMATION FOR SEQ ID NO:260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 705 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```

GAATTCGGCC AAAGAGGCCT AAGGGATTGT TATTCTTTA AAAAAAACC AATACCAAAG      60
AAGCCTACAA TGTTGGCCTT AGCCAAAATT CTGTTGATT CAACGTTGTT TTATTCACCTT      120
CTATCGGGGA GCCATGGAAA AGAAAATCAA GACATAAACA CAACACAGAA CATTGCAGAA      180
GTTTTTAAAA CAATGGAAAA TAAACCTATT TCTTTGGAAA GTGAAGCAAA CTTAAACTCA      240
GATAAAGAAA ATATAACCAC CTCAAATCTC AAGGCGAGTC ATTCCCTCC TTTGAATCTA      300
CCCAACAACA GCCACGGAAT AACAGATTTC TCCAGTAACT CATCAGCAGA GCATTCTTTG      360

```

GGCAGTCTAA	AACCCACATC	TACCATTTC	ACAAGCCCTC	CCTTGATCCA	TAGCTTTGTT	420
TCTAAAGTGC	CTTGAATGC	ACCTATAGCA	GATGAAGATC	TTTTGCCCAT	CTCAGCACAT	480
CCCAATGCTA	CACCTGCTCT	GTCTTCAGAA	AACTTCACCT	GGTCTTTGGT	CAATGACACC	540
GTGAAAACCTC	GTGATAACAG	TTCCATTACA	GTTAGCATCC	TCTCTTCAGA	ACCAACTTCT	600
CCATCTGTGA	CCCCCTTGAT	AGTGGAAACCA	AGTGGATGGC	TTACCACAAA	CAGTGATAGC	660
TTCACTGGGT	TTACCCCTTA	TCAAGAAAAA	ACAACCTCTAC	CTACC		705

(2) INFORMATION FOR SEQ ID NO:261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 729 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

GAATTCGGCC	AAAGAGGCCT	ACCTTACTTG	AGTCCACAGG	CAAGGCCCAA	TAATGCATAT	60
ACTGCCATGT	CAGATTCCCTA	CTTACCCAGT	TACTACAGTC	CCTCCATTGG	CTTCTCCTAT	120
TCTTTGGGTG	AAGCTGCTTG	GTCTACGGGG	GGTGACACAG	CCATGCCCTA	CTTAACCTTCT	180
TATGGACAGC	TGAGCAACGG	AGAGCCCCAC	TTCTTACCAG	ATGCAATGTT	TGGGCAACCA	240
GGAGCCCTAG	GTAGCACTCC	ATTTCTTGGT	CAGCATGGTT	TTAATTTCTT	TCCCAGTGGG	300
ATTGACTTCT	CAGCATGGGG	AAATAACAGT	TCTCAGGGAC	AGTCTACTCA	GAGCTCTGGA	360
TATAGTAGCA	ATTATGCTTA	TGCACCTAGC	TCCTTAGGTG	GAGCCATGAT	TGATGGACAG	420
TCAGCTTTTG	CCAATGAGAC	CCTCAATAAG	GCTCCTGGCA	TGAATACTAT	AGACCAAGGG	480
ATGGCAGCAC	TGAAGTTGGG	TAGCACAGAA	GTTGCAAGCA	ATGTTCCAAA	AGTTGTAGGT	540
TCTGCTGTTG	GTAGCGGGTC	CATTACTAGT	AACATCGTGG	CTTCCAATAG	TTTGCCCTCCA	600
GCCACCATTG	CTCCTCCAAA	ACCAGCATCT	TGGGCTGATA	TTGCTAGCAA	GCCTGCAAAA	660
CAGCAACCTA	AACTGAAGAC	CAAGAATGGC	ATTGCAGGGT	CAAGTCTTCC	GCCACCCCCA	720
ACACTCGAG						729

(2) INFORMATION FOR SEQ ID NO:262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 686 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

GAATTCGGCC	AAAGAGGCCT	ACTACCATGT	CCTCTTGGAG	CAGACAGCGA	CCAAAAAGCC	60
CAGGGGGCAT	TCAACCCCAT	GTTTCTAGAA	CTCTGTTCTT	GCTGCTGCTG	TTGGCAGCCT	120
CAGCCTGGGG	GGTCACCTG	AGCCCCAAG	ACTGCCAGGT	GTTCCGCTCA	GACCATGGCA	180
GCTCCATCTC	CTGTCAACCA	CCTGCCGAAA	TCCCCGGCTA	CCTGCCAGCC	GACACCGTGC	240
ACCTGGCCGT	GGAATTCTTC	AACCTGACCC	ACCTGCCAGC	CAACCTCCTC	CAGGGCGCCT	300
CTAAGCTCCA	AGAATTGCAC	CTCTCCAGCA	ATGGGCTGGA	AAGCCTCTCG	CCCGAATTCC	360
TGCGGCCAGT	GCCGCAGCTG	AGGGTGCTGG	ATCTAACCCG	AAACGCCCTG	ACCGGGCTGC	420
CCTCGGGCCT	CTTCCAGGCC	TCAGCCACCC	TGACACCCCT	GGTATTGAAA	GAAAACCAAGC	480
TGGAGGTCTT	GGAGGTCTCG	TGGCTACACG	GCCTGAAAGC	TCTGGGGCAT	CTGGACCTGT	540
CTGGGAACCG	CCTCCGAAA	CTGCCCCCG	GGCTGCTGGC	CAACTTCACC	CTCCTGCGCA	600
CCCTTGACCT	TGGGGAGAAC	CAGTTGGAGA	CCTTGCCACC	TGACCTCCTG	AGGGGTCCGC	660
TGCAATTAGA	ACGGCACATT	CTCGAG				686

(2) INFORMATION FOR SEQ ID NO:263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```

GAATTCGGCC AAAGAGGCCT AGGAGAGAGG AGGTGCTGCA AGACTCTCTG GTAGAAAAAT      60
GAAGAGGGTC CTGGTACTAC TGCTTGCTGT GGCATTGGA CATGCTTTAG AGAGAGGCCG      120
GGATTATGAA AAGAATAAAG TCTGCAAGGA ATTCTCCCAT CTGGGAAAGG AGGACTTCAC      180
ATCTCTGTCA CTAGTCCTGT ACAGTAGAAA ATTTCCCACT GGCACGTTTG AACAGGTCAG      240
CCAACTTGTG AAGGAAGTTG TCTCCTTGAC CGAAGCCTGC TGTGCGGAAG GGGCTGACCC      300
TGACTGTTAT GACACCAGGA CCTCAGCACT GTCTGCCAAG TCCTGTGAAA GTAATTCTCC      360
ATTCCTCGTT CACCCAGGCA CTGCTGAGTG CTGCACCAA GAGGGCCTGG AACGAAAGCT      420
CTGCATGGCT GCTCTGAAAC ACCAGCCACA GGAATTCCT ACCTACGTGG AACCCACAAA      480
TGATGAAATC TGTGAGGCGT TCAGGAAAGA TCCAAAGGAA TATGCTAATC AATTTATGTG      540
GGAATATTCC ACTAATTACG GACAGCTCGA G                                     571

```

(2) INFORMATION FOR SEQ ID NO:264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

```

GAATTCGGCC AAAGAGGCCT ACCAAGCAAG AACAGCTAAA ATGAAAGCCA TCATTCATCT      60
TACTCTTCTT GCTCTCCTTT CTGTAAACAC AGTCACCAAC CAAGGCAACT CAGCTGATGC      120
TGTAACAACC ACAGAAACTG CGACTAGTGG TCCTACAGTA GCTGCAGCTG ATACCACTGA      180
AACTAATTTC CCTGAAACTG CTAGCACCAC AGCAAATACA CCTTCTTTCC CAACAGCTAC      240
TTCACCTGCT CCCCCATAA TTAGTACACA TAGTTCTCTC ACAATTCCTA CACCTGCTCC      300
CCCCATACTC GAG                                     313

```

(2) INFORMATION FOR SEQ ID NO:265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

```

GAATTCGGCC TTCATGCCTA GCCTCTGAGT TCAGCTCAGA ACACAGATGA TCTCATTGAT      60
TCCTCACGTC AACCTTGGGA AATCTGGGTA CCCTGGGACG TCCACACATG AGGACCGAGG      120
CTCAGGGACA TCAAGGGAAT GGCCTGGTCC CAGAAACAGG GAGTAAATG GGAAGTAAAC      180
TCAGTCCCAC GTCTGGCTGA CTCCAGAGTT TGGGCCACTG AACCATGCGG CTGCCATCTT      240
GGAGTTCTTT GAGCTGTGAA GTGCTGTGCA TCGTGTGATT CTGTGTCCCT TTTGTGCAGG      300
TACCAGGATT TCTATGCATT CGACCTGTCA GGAGCCACTC GAG                                     343

```

(2) INFORMATION FOR SEQ ID NO:266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```

GAATTCGGCC TTCATGGCCT ACAGGAAGCA CAGAAAGACA AAATTGGAAA TGTCTAGTTC      60
CATGTTGATG CCTTCAGAAG ATGCAGGTGA ACAAAGAGAG GCCGGGAAAT CAGAGCTAGT      120
TGAAACCCAA CATGTTACCT TAGAGCCAGA GCTACCACTG AGTTCTCTAA GCACAGTCAA      180
ATCCCAGGAT TATGCTGAAA CAGAGCAGGA GGTCAATTTA CAAGCTATAG AGGCCATGGA      240
GGCCACAGAA GCCCTGGAGG CCACAGACGC CATGGAAGCC ATAGATCAAG GTAGCATGAA      300
AGATTATGGA GATGTGATCT CTAAGCTGGA AAGACTCGAG                                340

```

(2) INFORMATION FOR SEQ ID NO:267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GAATTCGGCC TTCATGGCCT AGGCACCCCT AGGCGACTCA GGGTTCGGGG AGGAGGAGAC      60
CAGACGGGGC CTTGGCTGGC ATGGCCCTCT CACAGGGCTG CCGTGAAGAA ACTTCGTGAC      120
AGCGGCGGAG AGGTGGCCCA GGAGTGAGAC AAGCAGGCC CCGGCCTTGG ACTCAGACAT      180
GCTGGGTCCG GTCAGGCCCG TGTGGGAACC AGTGTTTTAG GGAAGTGGTA CTCTCTTAGA      240
GAAGAACTGA TGCTAAAGAG TCAGGAAGAC ACGAGCGGGC CAAATAAAAG AGGAAGAGAG      300
GCCCTCAGGA CATCATGGCA CTTACTGCTT GGATTGTGCT CCCCCTCCAG AATTCTGTGG      360
ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

GAATTCGGCC TTCATGGCCT ACTTGGGAAT TAACATCTTC GATAAATCCC AGAAGTCTTT      60
AAGTGACAGT AGAGAGCCTA CAGAGAAGCC TGGGAAAGCA GAAAAATCTA AGAGCCCAGA      120
AAAAGTGTC TCGTTCTCAA ACTCCTCCTC CAACAAGGAA TCAAAAGTAA ACAATGAGAA      180
GTTTCGTACT AAGAGCCCCA AGCCTGCCGA AAGCCCCCAG TCAGCCACTA AGCAGTTGGA      240
TCAGCCCACT GCTGCTTATG AGTATTATGA TGCTGGCAAT CACTGGTGCA AAGACTGCAA      300
CACCATCTGT GGGACTCGAG                                320

```

(2) INFORMATION FOR SEQ ID NO:269:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 542 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```
GAATTCGGCC AAAGAGGCCT AGGGATATTT ACTGAGGGCC TACAGGGTGC CCAATACTGA      60
GCTAGCTAGG CTCAGGGACC TGTACACACA TGCATTCTCC ATTAGGGTTC TGCAATCCTG      120
ACACTATTAC TATCCTCAAG GACTCTGCGC ATCCAGACCC GTCTATTAGT TAGCAATGAG      180
AACCCTGACC ATGGCCAAGT TACACAAGAA CACCCTTGCC CTACCTCTGC CCCCTGCNGA      240
TCTGAAAGTA ACCTGGTCTG AAAGAGAAGT AAAGATGTGG CTGTCCCTGG GTGCTAGGGA      300
GAGAGGCCTG TTGACAAAGC CACCAGCTGT CTCCAGTCAG AGCCAGGGAG ACAGGCTTCT      360
CCCTGCACCA TCCGCACTGC CATAGACACA GCAGCCAGCA ACAGCACTTG GACCATACG      420
GAGTTCCAGG CCCAGTCTCC AACTGACCTC CCTCCTGCTC CAGCTGCCCA TGCTAACAAAG      480
AGCCAGGGCA CAAGACCTCA CTTGGAACAA GTACCAGGCA GAAGAGAGCA TNACCNGCCG      540
GT                                                                                   542
```

(2) INFORMATION FOR SEQ ID NO:270:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 613 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

```
GAATTCGGCC AAAGAGCCTA GTCGATTGAA TTCTAGACCT GCCTCCTTTT CCACTTGAAT      60
TGTTAAATTG TTTACTCCAG CATCTTTAAG TATTCCTGTA ACCTGCTGTA CTATTCTTTG      120
TTCTAGCACA TCAGATGTCA CCTGTATATG AATTGTTTCT GCCACAATAC TAGCAGAATG      180
ACGCCAAAAA TGTGGGTCTC GGTATGATAT TAATCCTTCA ATTTTCTGTA TCTTTTCTAA      240
AGCAATATGT AGTTCTTTT CATATTCTGG TGGCAATCTC AGGAGTAGAA CCTGGCAGGC      300
ATCTTTAATC AGTGAACAA CACTGAGAAA TATTAATATA GCAATAAAAA GAGAACAGAG      360
TGGGTCAGCG ATGAACCATC CAACTGCTC TATAAGAACT GTGGATACGA TCACACCAAT      420
GCTGCCAAGA GTATCTGCCA AAACATGTAG AAATACACCC CTCATGTTAG CATTCATGCC      480
TCCACCCGCA GATCCGTGGC TGTGACCATG CCCATGGTCA CTGTGTCCAT GCATATGATG      540
TGAATGGCTG TGATCAGATG AGTGACAGCT TCCTTGAGCC TAAACCGTCG ATTGAATTCT      600
AGACTGCCTC GAG                                                                                   613
```

(2) INFORMATION FOR SEQ ID NO:271:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 763 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

```
GAATTCGGCC AAAGAGGCCT AGTCTGGTTC TTGCTTGATC TGAGAGCTTC CATCAGTCTC      60
TTTATTCTCT TCTGTGGCTG GAACTTCCAA CTGGCTTGGT TCAGCTGATT CTTGTATCAC      120
```

```

GGGGCCTTCT GACTCACTCT GATCAACCAG CTGGTTATTA ATCACAAGTC CTGGAAATGG 180
TCTAATGACC GTGAATTTGA TAAACTCGGC AGAGTCTAAG ATCCTTCTCA TGGAGCTGAT 240
TTCCAGGTAG CTGGGGGCTT TGAAAGGACA CCCCCGGGGG CATGCCATCA ACTACCACAC 300
AGCCAGGGTT AATTGTGATT TCCCTGTAGG GAACTTTCAC AGGAAAACCC ATACCAATAG 360
CTTCACCAAA TTTCGACTA AAGAGGTCAT TCACTTGTTT TCTTAGCTGT CTAGCTTTT 420
CAACTTTCGA GAGTCTTTCA TTATCATCAT CTGGAATTGT CACCTGAATG ATGTTAAGGT 480
CTTCAACACC TGATGCAGTA GTATTAACAT TGGGTGATGA ATTTATTTT CTGGGAGGGC 540
TCTTAGAGGA GGTGCTCTCC TTAATCGCCG TCTCAAACAT TTCGGGCTTT TTAATGATGA 600
ACTTAATTTT GGCTTTGTTT CTGAGTATCT TCTCCAGCCT CGGAATGCCA AAAGTCGATG 660
GTCTTCGGAA TGGCACACCC TCAGGTAAGC CTTCCACATA AAAGTCTTCC GGGAAAGACT 720
CAAATAACGC GAACGGCACC TTCACAGCTT GTTTAAGGCC AAG 763

```

(2) INFORMATION FOR SEQ ID NO:272:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 102 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

```

GAATTCGGCC AAAGAGGCCT AATTAAGGAA ATACTTTGCA TAAATTAATC AGCCCCACAG 60
TATTTCTTAA ATAAGAATAA AATGAATTTA AACTGATTC TG 102

```

(2) INFORMATION FOR SEQ ID NO:273:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 565 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

```

GAATTCGGCC AAANAGGCCT ACNCCAGTCA AGGAAAGTCA AGTNGCAAGA AGGAANTGTC 60
TAAAAGAGAT GGCAAGGAGA AAAAAGACAG AGGAGTGACG AGGTTTCAGG AAAATGCCAG 120
TGAAGGGAAG GCCCCTGCAG AANACGTCTT TAAGAAGCCC CTGCCTCCTA CTGTGAAGAA 180
GGAAGAGAGT CCCCCTCCAC CTAAAGTGGT AAACCCACTG ATCGGCCTCT TGGGTGAATA 240
TGGAGGAGAC AGTGACTATG AGGAGGAAGA AGAGGAGGAA CAGACCCCTC CCCCACAGCC 300
CCGCACAGCA CAGCCCCAGA AGCGAGAGGA GCAAACCAAG AAGGAGAATG AAGAAGACAA 360
ACTCACTGAC TGGAATAAAC TGGCTTGTCT GCTTTGCAGA AGGCAGTTTC CCAATAAAGA 420
AGTTCTGATC AAACACCAGC AGCTGTCAGA CCTGCACAAG CAAAACCTGG AAATCCACCG 480
GAAGATAAAA CAGTCTGAGC AGGAGCTAGC CTATCTGGAA AGGAGAGAAC GAGAGGGAAA 540
GTTTAAAGGA ATAGGAAATC TCGAG 565

```

(2) INFORMATION FOR SEQ ID NO:274:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 188 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GAATTCGGCC AAAGAGGCCT ACTTAAATCA AGGCCAAAAC TAAGGATTTA GGTAGAGTGT	60
ATTAGCCTTT CAATACCTGC TTATTAAACA GTTGTTTTCA TACTTTTCAA AGGTGTGTAG	120
AAGTTTTGTA AATAAATTTT CTGATAGGAT AAAGTAGATT CCCTATGATC TCTTATTAT	180
TTATCATT	188

(2) INFORMATION FOR SEQ ID NO:275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GAATTCGGCC AAAGAGGCCT AGTCCGTGAT GCGTACACAC CTGTCGAGCA CGAGCTCCTC	60
TAGGCGGTGC AGGTCGCAGG CCACGTACTC CAGCGCCATG TCGGTGATNC GTGGGCACCA	120
CGAGAGGTCA AGGNTGCGCA GCTTGCGCAG GTTCTCGGCC ACGAGCTCCA CGCCGTGCTC	180
GGTGACCTTG GAGCAGCCCG AGAGGCTGAA CGCGGTGAGG TTGGGCAGGN TGTGCACCAC	240
GTTGACCACG CCGTGGTTGG TGATCTCCCA GCAGGAGAGC AGGCGCAGCG TGTGCGTGCT	300
GTGGCCCTGG CGCGCCGTGA AGTAGGCCAG CGCCGTGTCC GTCACGTGGT AGGCCTGCAG	360
GCTCAGCTCC GCCAGGTTGG GCAGCAGCTG CGAGATGGCC GCGATGGCGT CGTCGGCCAC	420
GTTGATGCAG TCACTCACGC TCAGCGAGGT GATGCGCGCG CTCAGGCTGG ACCACAGCCC	480
GGCCTCGGTG AAGTCGTTGC AGCCCGACAG CTCCAGACGC ACCACGCCCT GCATCTGTTT	540
AAGCATAACC TCGAG	555

(2) INFORMATION FOR SEQ ID NO:276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GAATTCGGCC AAAGAGGCCT ACAGTGAATA ATCAGAAGTC AGTTTGGGAG AAGTCAAAAT	60
GGACACAATC TTCTTGTTGA GTCTTCTATT GCTGTTTTTT GGAAGTCAAG CCTCAAGATG	120
CTCAGCTCAA AAAAATACCG AATTGTCAGT GGATCTTTAT CAAGAGGTTT CCTTATCTCA	180
TAAGGACAAC ATTATATTTT CACCCCTTGG AATAACTTTG GTTCTTGAGA TGGTACAAC	240
GGGAGCCAAA GGAAAAGCAC AGCAGCAGAT AAGACAACT TTAACAAC AGGAAACCTC	300
AGCTGGGGAA GAATTTTTTG TACTGAAGTC ATTTTCTCT GCCATCTCAG AGAAAAACA	360
AGAATTTACA TTTAATCTTG CCAATGCCCT CTACCTTCAA GAAGGATTCA CTGTGAAAGA	420
ACAGTATCTC CATGGCAACA AGGAATTTT TCAGAGTGCT ATAAACTGG TGGATTTTCA	480
AGATACAAGG CTCGAG	496

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

```

GAATTCGGCC AAAGAGGCCT ACACCCAGAG ACTGTAATTT GTGTAGTTTT TCTTTTTTAA      60
CTTAAAGACA ACTTTAAAAA ATACTTACAT TAATGTTTTT TATATTCATA GGTGGGTATA      120
TTGCGCTCAT TCAAATGGCA GTAGCCTTGG CTCACATAAG ACATGTTTCA TGTGATCTGT      180
ATCCTGGCAT ACCAGTTATA TTTTGTGGGG ACTTTAATAG TACACCATCA ACAGGAATGT      240
ATCATTTTGT CATCAATGGC AGCATTCCAG AGGATCATGA AGACTGGGCT TCCAATGGGG      300
AGGAGGAAAG ATGCAATATG TCTCTTACAC ATTCTTCAA GCTGAAAAGT GCTTGTGGTG      360
AACCTGCTTA CACAAATTAT GTTGGTGGCT TTCATGGATG TCTAGATTAC ATTTTCATTG      420
ACTTAAATGC TTTAGAGGTT GAACAGGTGA TTCCATTACC TAGTCATGAA GAAGTTACCA      480
CTCCACTCGA G                                     491

```

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

```

GAATTCGGCC AAAGAGGCCT ACAGAGAACA GATAAAAATA AGCCTGTGGA ATGACCACTT      60
TGTGGAATAC GGCAGAACCG TGTGTATGTT TCGCACAGAG AAGATTCGGA AGCTCGTAGC      120
CATGGGCATC CCTGAATCTT TGCGAGGGAG ACTCTGGCTT CTCTTCTCAG ATGCGGTGAC      180
GGATCTTGCC TCACACCCTG GTTACTACGG GAATCTGGTG GAGGAGTCCC TGGGGAAATG      240
CTGCCTGGTA ACCGAGGAGA TAGAACGAGA CCTGCACCGC TCCCTGCCAG AGCACCCCGC      300
CTTCCAGAAC GAAACGGGAA TTGCTGCTTT GAGGAGAGTC TTGACGGCCT ATGCCACCGG      360
GAGCTCGAG                                     369

```

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

```

GAATTCGGCC AAAGAGGCCT ACTCTCCCTT TCCACTCCCT GGTGTTCCCA GGAGTGAGAT      60
GAGGGTGGAG GGGCCCAGCA CAGCACCTTC AACCTCAGGA TGAGAGAGGC CCTTTCACAA      120
AACTCTAAGG CAGGGGAACA GGAACAGAG AAAGCCGGAG AACCCACGGA GGGCCCCAAG      180
AGCGGATTCT GGTGATTATT AATGTGCTTG CCAATGAAG AAAGAATACT GGCACCTCTCT      240
AGGTATGATG AGAGCAGACA GCAAACGTGG GGCCTGTCTA CAGTGATTCT CTACCCCAAT      300
GTATGGTCAT CCACGTTAGA AGCAGCAGTG AAAGGCGTGT TGCTTTTCAT TATTAACCTC      360
AAATCCCACT CCCTAAACCA GCTCTTGACG CCCCTCTGTC AGGTGCTAAT CCTGGAACCT      420
GGAGGCCACC TGGTCTCCAC TTTAGGTGAG GAAAACCTGG GAGAAGCCAT CAGACTGCAC      480
CTGTGGCATG AGATGCTTTG AGACAGGTCA AGAGGAGGAG CTCTCGAG      528

```

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

GAATTCGGCC	AAAGAGGCCT	ACAGTGTCGG	AGTAGATTG	AAACTGGAGG	TGAAGGTAGG	60
AGTAAGTGAT	AGATTTTGA	ATTAGTGCTC	AGAGCTGAAA	TATCCAGTCC	GTGAACCTAG	120
AGGCCAGCCT	TCATACCACT	GTGATGACAG	GAACCTACCT	AATCTTTTCT	GTCTTTTCT	180
CTCTGCTGTC	CCTCGGGCTG	CCAGGCCAGC	AGCAACACCC	ACAGGTAATC	TCCCCGCTGA	240
CTCCATCCAC	TTGCTCTGCC	CTCTGCCCTC	TCTGTGCCCC	GTTGCACCTG	AGCGTACACC	300
CCAGCAGTGG	CATCCAATC	GAG				323

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 337 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

GAATTCGGCC	AAAGAGGCCT	ACTCAGTCAG	TACCATGCCA	GTTACCTTTT	TTCTTTGTGA	60
CTTAATGAAT	TGGATTTTCC	TCAATCTGTT	ATTTGTAGGA	GGTTTGTATG	GGGCCAGGGT	120
AGATTTCCAG	ATTTCTGCCT	CAGAGGTAGT	CTTTTTCACA	TATGACACCT	GGGTGTGTTT	180
CTCTGTGTGG	CCACAAGTCT	TCTGCCCTCT	TAAAAAATG	TCTAGACCTT	CTAGAAGGTC	240
TTTGCCGCT	AATTCTGAAC	TTTCCACTCC	TTCTTTTGCA	GCTGTGATTG	GAGGGACATG	300
GCTCCAGCAT	GCCAATGTAA	ACCACGCCCC	CCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 194 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

GAATTCGGCC	AAAGAGGCCT	AGGCTCTTCC	ACTTAATTTC	ATACTTTTCAG	GTCTGGATGC	60
CCATTTTAAT	TCTTCTGAAA	GCATGCCTCC	TTCTGGCTTC	AGGACTCCAT	CTCCAGCCTT	120
ATGATCTAAA	AATAATGGAA	AATTACCCGG	TATCGTTAGA	GCTACACCAA	AATTGCATTG	180
AGCCAAAATC	CGAG					194

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 296 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

```

GAATTCGGCC AAAGAGGCCT AAAATCATCA TATTCATAGA GATATTAAAA GTGCAAATAT      60
CTTACTGGAT GAAGCTTTTA CTGCTAAAAAT ATCTGACTTT GGCCTTGACAC GGGCTTCTGA      120
GAAGTTTTCG CCAGACAGTC ATGACTAGCA GAATTGTGGG AACAAACAGCT TATATGGCAC      180
CAGAAGCTTT GCGTGGAGAA ATAACACCCA AATCTGATAT TTACAGCTTT GGTGTGGTTT      240
TACTAGAAAT AATAACTGGA CTTCCAGCTG TGGATGAACA CCGTGAACCA CTCGAG      296

```

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

```

GAATTCGGCC AAAGAGGCCT AGCAACATCC ACGCAGCTGC TCATCAGGTA CGAGTGCTTC      60
CATATCCATT TACCCACCAT TGGCAATTTG AAAGGACCAT CCAGACCCCC ATAGGATCCA      120
CATGGAACAC CCAGAGGGCT TTCCAAAAGC TGACTACTCC CAAGGTCGTC ACCAAGCCAG      180
GCCATATCAT TAACCCCATTA AAAGCAGAAG ACGTGGGCTA CCGGTCTTCC TCAAGGTCGG      240
ACCTGTCTGT CATAACAGAGG AATCCAAAAC GAATCACCAC ACGTCACAAA AAACAGCTGA      300
AGAAATGCTC TGTAGATTGA GTTGCTGGAG GAGTGACAGC CAGGAGCCCT GACTTCACTT      360
CCTTTGGTCC AGTTTACTC TGATACAGGG TGGATTCCAA AACTGGCTCA GTACATTGCA      420
TGTAGTTAAG CCACATTTTA AAAATAAAGG CTCGAG      456

```

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

```

GAATTCGGCC AAAGAGGCCT AAGGTCGGCC TGTTATCTT GATTAGCATC CAGGCCTTGG      60
AATATTTCAT CAATGACAGC TTTATCTTTG ATATTCTTGA TGGTGTGTC AAGCTCCTTT      120
GTAAGCAGCT GCTTCAGCTC ACCCTCGAG      150

```

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

AATCCAAGCA ATAACCCAAG CAAAACCTTCA GATGCACCTT ATGATTCTGC AGATGACTGG 60
TCTGAGCATA TTAGCTCTTC TGGGAAAAAG TACTACTACA ATTGTGCAAC TCGAG 115

(2) INFORMATION FOR SEQ ID NO:287:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 278 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

GGAAGAAGAT GCTAGGAGAA GACTCAGATG AAGAAGAGGA AATGGATACC TCTGAAAGGA 60
AGATAAATGC TGGTAGCCAA GATGATGAGA TGGGTTGCAC CTGGGGAATG GGAGAAGATG 120
CAGTAGAGGA TGATGCTGAA GAGAACCCTA TTGTCTTAGA GTTTCAGCAG GAAAGGGAGG 180
CCTTTTATAT AAAGGATCCC AAAAAGGCTC TCCAAGGCTT TTTTGACCAG GAAGGAGAAG 240
AATTAGAATA TGAATTTGAT GAACAGGGAC AACTCGAG 278

(2) INFORMATION FOR SEQ ID NO:288:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 364 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

GGATTTCTGA GGCCAACTGC CCAATAGTTT CCAGTAGAAA CATGGCCATA CCAGTCTAGA 60
ATTTAACCTT CTCATTTAAT CAATAGCACA ATCTAACCTA CACAAGAATA AGCAATCAAA 120
CATCCAGTAT AACATGTTTT TCATTTTAC TTCTTGCGG TCAATTTTTT TAATGATCTA 180
TTTAAATTT TTTCAAAATG ACAACTACTA TGGAACTACTG AATACAAAGT TCAGTAACAC 240
AACATTGATA ACAACAACAG CAGCAACAAT ACCACAACCA CCACCACTGA ATGGTCTGGG 300
CACCTTCACA ATGGCTGTTG TACTTAGTTA CGAAGAAGAG TGGGGACAGA AAATGAAGCT 360
CGAG 364

(2) INFORMATION FOR SEQ ID NO:289:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 471 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

GACTCCATGC GTATGTCCCA CCTAAAGGTC GGCTCTGCTG CCGACATCCC CATCAACATC 60
TCAGAGACGG ATCTCAGCCT GCTGACGGCC ACTGTGGTCC CGCCCTCGGG CCGGGAGGAG 120
CCCTGTTTGC TGAAGCGGCT GCGTAATGGC CACGTGGGGA TTTCAATCGT GCCCAAGGAG 180
ACGGGGGAGC ACCTGGTGCA TGTGAAGAAA AATGGCCAGC ACGTGGCCAG CAGCCCCATC 240
CCGGTGGTGA TCAGCCAGTC GGAAATTGGG GATGCCAGTC GTGTTCGGGT CTCTGGTCAG 300
GGCCTTCACG AAGGCCACAC CTTTGAGCCT GCAGAGTTTA TCATTGATAC CCGCGATGCA 360

GGCTATGGTG GGCTCAGCCT GTCCATTGAG GGCCCCAGCA AGGTGGACAT CAACACAGAG 420
GACCTGGAGG ACGGGACGTG CAGGGTCACC TACTGCCCCA CAGAGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

GAATTCGGCC TTCATGGCCT AGATTGAGTC ACATTGTTCT CTTTGATCCA TTTTCTTTTA 60
GACAACATCA CTCAAACAAC CCTATTACTT CAGTAGCAAT GAACTGTCTC TGGATTTTAT 120
TAAGCATCTC ACTAGTTCCT TTCTTCAGC TGTATGGCAC CCTGTCTTCC TGTACACCAG 180
AGGCTCCTCA GCTGGGTAAG GTGAGCCAAC GTTACCAGGA GTATATGCTG AGAGGCCATT 240
TCAAAGTCTT TCATAGAAGG CTGTGCTTGG GCAAACCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

GAAACTCTGC CCCTGAAGGT TTGTTTTCTA ATTCAGAGGT TTAAATTAAT CTAGCCCACT 60
TAATAAAACC AGAGATCCTA TGGGAAATTT AGCCTAAGAC AGTGCTGGAA ATTGCCATAT 120
GTTGATACAA AGAAGTGTTT GGCCACATTA CAGGTCTCAG ACTCAACTGC TATGTGTGAC 180
TGCCGCTCTG TGCCTATGTC TTGCTTTTTT GCTGAGTTCC CTATTTCCAT ATCTCCAGGT 240
GATCCTCGAG 250

(2) INFORMATION FOR SEQ ID NO:292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

GAAATGTCAG AGGCACATAA GCTTTTACAA AAATTGTTGG TTCATTGTCA GAAACTGAAG 60
AACACAGAAA TGGTGATCAG TGTCTACTG TCCGTGGCAG AGCTGTACTG GCGATCTTCC 120
TCCCCTACCA TCGCGCTGCC CATGCTCCTG CAGGCTCTGG CCCTCTCCAA GGAGTACCGG 180
TTACAGTACT TGGCCTCTGA AACAGTGCTG AACTTGGCTT TTGCGCAGCT CATTCTTGGA 240
ATCCCAGAAC AGGCCCAACT CGAG 264

(2) INFORMATION FOR SEQ ID NO:293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

```

GAATTCGGCC CTCATGGCC TAGGTTTCTC CGTGTGGTGC AGGCTGGTCT CGAACTCCTG      60
ACCTCAGGTG ATCCACCTGC CTCAGCCTCC CAAAGTGCTG GGATTACAGG CATGAGCCAC      120
CATGTCCTGC TATAAATAAC TTTTAATAGG CTCTTTTCTT GGCTTTTTTT TTTAGTAACT      180
CAGCCCATTT TCTTCTTCTC AATCTGGTCT TTGTTAATGT TGATAACGCT GTCTTACTTT      240
TAAATTGCCG TGATTAGAAA TTAGTAGAGA TATATAAACC TAGTCTTTTG GGGGATTTTG      300
AAAGGGTCAT AGTATTCTTA CTGTCTTTCA AAATGTACCT TATATTTGAA CATTGGAAGA      360
TACGTGTTGC TGAATACAAG TTAGTTTCAT ACACACACAT ACACATGACA CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

```

GAATTCGGCC TTCATGGCCT ACTCCATTCC CAGATAGAAA GCTTGAATGA AGAGTTGGTC      60
CAGCTGCTTC TCATCCGAGA TGAGCTGCAC ACAGAGCAGG ATGCCATGCT GGTGGACATT      120
GAAGACTTGA CCAGACATGC TGAAAGTCAG CAGAAGCACA TGGCAGAGAA AATGCCTGCA      180
AAGTGAAAAG AAGCCATTCA ACCAGAGAAC AAGCTAGAAT TTATTTTGCT TCTGTGGTTG      240
TAAAAATGCT GTTGCTAAAG GTGGCGCAGA AACAAATATC AGTGTTAGTC ATTGATAATG      300
TCTGAAGCTT AATGTCCAGT GATTGGCCTT TGCTTCTTAA TTTATTTTAA TTTTITACTT      360
GTGCCACTTA ATATCAGGCA TTTTAATAAA ATATTGTTAC AAAAAATGTA CAGTACTGAC      420
ACCACCACAA ATCATGGTTA ATAAAGAGA GTCTCGAG      458

```

(2) INFORMATION FOR SEQ ID NO:295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

```

GTGTAAAACC AATGCCAGGA AAACCAAATA CACAAAACCC TCCACGGAGA GGTCTCTCTGA      60
GCCAGAAATGG GTCTTTTGGC CCATCCCCTG TGAGTGGTGG AGAATGCTCC CCTCCATTGA      120
CAGTGGAGCC ACCCGTGAGA CCTCTCTCTG CTAATCTCAA TCGAAGAGAT ATGCCTAGAA      180
GTGAATTGG ATCAGTGGAC GGGCCTCTAC CTCATCCTCG ATGGTCAGCT GAGGCATCTG      240
GGAAACCCCTC TCCTTCTGAT CCAGGATCTG GTACAGCTAC CATGATGAAC AGCAGTCTCG      300
AG      302

```

(2) INFORMATION FOR SEQ ID NO:296:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 412 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

CATGGATCTG	CCTCCTGAGA	GGGATGGAGA	GAAGGGGAGG	AGCACAAAGC	CTGGCTTTGC	60
CATGCCAAAA	CTTGCACTTC	CCAAAATGAA	GGCTTCTAAG	AGTGGGGTCA	GCCTGCCACA	120
GAGAGACGTG	GATCCTTCCC	TTTCTAGTGC	CACAGCAGGG	GGTAGCTTTC	AAGACACAGA	180
AAAGGCCAGC	AGTGACGGTG	GTAGGGGAGG	ACTTGGTGCA	ACAGCAAGTG	CCACAGGAAG	240
TGAGGGTGTG	AACCTCCACC	GGCCACAGGT	CCACATTCCC	AGTTTGGGCT	TTGCCAAACC	300
TGATCTCAGA	TCCTCCAAGG	CCAAGGTGGA	GGTGAGCCAG	CCTGAAGCTG	ACCTGCCTCT	360
TCCCAACAT	GATCTGTCTA	CCGAAGTGA	CAGCAGAGGA	TGTGGGCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:297:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 308 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

GTGCTGGTGG	CGCGGGGAGT	GCGCGTCAAG	GTGAACGAGG	CCTACCGGTT	CCGCGTGGCA	60
CTGCCTGCGT	ACCCAGCGTC	GCTCACCGAC	GTCTCCCTGG	CGCTGAGCGA	GCTGCGCCCC	120
AACGACTCAG	GTATCTATCG	CTGTGAGGTC	CAGCACGGCA	TCGATGACAG	CAGCGACGCT	180
GTGGAGGTCA	AGGTCAAAGG	GGTCGTCTTT	CTCTACCGAG	AGGGCTCTGC	CCGCTATGCT	240
TTCTCCTTTT	CTGGGGCCCA	GGAGGCTGT	GCCCGCATTG	GAGCCCATAT	CGCCACCCCA	300
ATCTCGAG						308

(2) INFORMATION FOR SEQ ID NO:298:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 269 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

GAATAAGTAA	ATTTCATGGAA	AGGAAGAAAT	TAAAAGAAAG	TGAGGAAAAG	GAAGTGCTTC	60
TGAAAACAAA	CCTTTCTGGA	CGGCAGAGCC	CAAGTTTCAA	GCTTTCCTTG	TCCAGTGGAA	120
CGAAGACTAA	CCTCACCAGC	CAGTCATCTA	CAACAAATCT	GCCTGGTTCT	CCGGGATCAC	180
CTGGATCCCC	AGGATCTCCA	GGCTCTCCTG	GATCCGTACC	TAAAAATACA	TCTCAGACGG	240
CAGCTATTAC	TACAAAGGGA	GGTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:299:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 458 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAGCGACCTT TGGAAATAGTT AAGCACAGGT CATTGTGGAC ATGAATTCAG GCCTCTGTAC	60
TAAAATCTAT TTCAGGGAAT GTTCTGTCTA GTGATTGCT CACCATTTGA TATATAATGA	120
ATTATAGGAC AAGTATAAGC TGATCTGCTA TAGCTGTCCA TCAGAGAGAA TACACGTGGC	180
TATAACATCT ATAACAAAAC GACGATTCCCT CTACAAGAGG CTGTTTCTCA CTGCTAACGT	240
TGGTGTCTTCT GGCCTGGGAA GAAATGCACA GGCCTGCATG GCATGCACGT TCAGACAGCT	300
GCATTGTAAG AGTTCTGTCA TGCAGTCTGA AAAGGGAAGA AACAGGATGG CTTTCTGTAG	360
CCACACCTGT GAGGCGTGAT GATTGTTGTA TTATTAGATT ACTGATTTTT CTTTCTGAA	420
AATACATTG AGTTTAAATC ACATCTGTGG AACTCGAG	458

(2) INFORMATION FOR SEQ ID NO:300:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 99 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GGGATGCCTG TTCTTGGGGT AGAGAAGTCA GGTAGCCCGAG GGCCCGCACT CTCAATAGAC	60
CTTCAGAGAA AAGGCATCGA GGTAAATGCC GCACTCGAG	99

(2) INFORMATION FOR SEQ ID NO:301:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 569 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GGTCTAACAG TAACACTACT CAAGAGACCC TGGAAATAAT GAAAGAATCA GAAAAAAAC	60
TGGTGAAGA ATCTGTAAAC AAAACAAGT TTATATCTAA GACTCCAAGT AAGGAAGAAA	120
TTGAGAAAGA ATGTGAAGAT ACCAGTTTGC GTCAGGAGAC ACAGAGGCGG ACATCTAACC	180
ATGGTCATGC CAGGAAAAGA GCCAAGTCTA ATTCCAAGCT AAAGTTGGTG CGTAGCCTGG	240
CAGTGTGTGA GGAGTCCTCC ACCCCATTTC CTGATGGGCC ATTAGAAACC CAGGATATAA	300
TTCAATTGCA CATCAGTTGC CTTCTGACA AGGAGGAAGA AAAGTCCACA AAAGATGTCT	360
CTGAAAAGGA AGACAAGGAC AAAACAAG AAAAGATCCC AAGGAAGATG CTGTCCAGAG	420
ACTCCAGCCA GGAATATACG GACTCCACTG GAATAGACCT ACATGAATTT CTTGTAAATA	480
CACTGAAAAA GAACCAAGG GACAGAATGA TGCTGCTAAA ATTAGAACAG GAGATTCTGG	540
AATTTATTAA TGACAACAAC CCACTCGAG	569

(2) INFORMATION FOR SEQ ID NO:302:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

```

GCGATTGAAT TCTAGACCTG CCACCCAAAC CCCAACTCTC AGACTTACCT CCCAAACCAC      60
AGATGAAGGA CCTGCCCCC AAACCACAGC TGGGAGACCT GCTAGCAAAA TCCCAGACTG      120
GAGATGTCTC ACCCAAGGCT CAGCAACCCT CTGAGGTAC ACTGAAGTCA CACCCATTGG      180
ATCTATCCCC AAATGTGCAG TCCAGAGACG CCATCCAAAA GCAAGCATCT GAAGACTCCA      240
ACGACCTCAC GCCTACTCTG CCAGAGACGC CCGTACCACT GCCCAGAAAA ATCAATACGG      300
GGGCACTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 683 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

```

ACAGCATGAA GGCAGAAGCC AATGCCCTGC ATCACAACA CGACAAGAGG AAGCGTCCGG      60
GGAAGAATGC ACCCCAGGA GGTGATGAGC CACTGGCAGA GACAGAGAGT GAAAGCGAGG      120
CAGAGCTGGC TGGCTTCTCC CCAGTGGTGG ATGTGAAGAA AACAGCATTG GCCTTGGCCA      180
TTACAGACTC AGAGCTGTCA GATGAGGAGG CTTCTATCTT GGAGAGTGGT GGCTTCTCCG      240
TATCCCGGGC CACAACCTCG CAGCTGACTG ATGTCTCCGA GGATTGTGAC CAGCAGAGCC      300
TGCCAAGTGA ACCAGAGGAG ACCTAAGCGG GGACCTAGGG GAGGGAGAGG AGGGAGAGCT      360
GGCCCCCTCC CGAAGACCTA CTAGGCCGTC CTCAAGCTCT GTCAAGGCAA GCCCTGGACT      420
CGGAGGAAGA GGAAGAGGAT GTGGCAGCTA AGGAAACCTT GTTGGCGCTC TCATCCCCCC      480
TCCACTTTGT GAACACGCAC TTCAATGGGG CAGGGTCCCC CCCAGATGGA GTGAAATGCT      540
CCCCTGGAGG ACCAGTGGAG ACACTGAGCC CCGAGACAGT GAGTGGTGGC CTCACTGCTC      600
TGCCCGGCAC CCTGTACCT CCACTTTGCC TTGTTGGAAG TGACCCAGCC CCTCCCCTT      660
CCATTCTCCC ACCTGATCTC GAG                                     683

```

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 653 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

```

GAATTCGGCC AAAGAGGCTT AGAGATGTCT ACTCTCAGCT CACGCCTGTA ATCCCAGCAT      60
TGTGGGGAGG TCAAGTTGGG TGGATTGCTT GAGCCCAGGA GTTTGAGACC AGCCTAAGCA      120
ATAGGCAAAA CCCTGTCTCT ACAAAAATCA GCCAGGTATG GTAGTGTGTA CCTGTAGTCC      180
TAGCTACTCA GGAGGCTGAG GTGGGAGGAT CGCTTGAGCC TGGGAGGTGA AGGCTGAAAT      240
TAGCCATGAT CATGCCACTG CACCCCAAGC CTGGGCAACA GAGCAAGACC TTGTCTCAA      300
AAAAAAGGA TGAGCTAGGT TTGTATCTGT AGACAGAGAT TTATGATTAA TTGGTAGGTG      360
AAAAAGTGTA TTAAAGTACA GTTATAGATT AGAGTACAAA ATGAATGAGT ATATATGCGT      420

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```

TTAAAAGTAT GTATACATAT CAGGAAAGGT TACATGAGGA TTTTCACTTT CCACCTTTATA 480
TCTCCCAGTA TTTGAATTTT TAATAACAAT CTTTTTATCA TAAAACTATA TTAAATTAAA 540
CTTTTAGATT TTTTAGTGGT ATAAGTAGAA CAGGAACCCT AATACATTGT TTTCTACTTT 600
TGTGATAAAG ATAATTCATG ATAGATGAAG TTGCAAACCG AAAGATCCTC GAG 653

```

(2) INFORMATION FOR SEQ ID NO:305:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 442 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

```

GAATTCGGCC TTCATGGCCT AAGGTATTCC AAAATGTCTA ATTTATTTTA TCCGATGGTA 60
AATGTAATAA TTAAAGAAAG AGGAAAGAAT CATGAAAGGT GGCCCTTAAA GAGGGCTTCT 120
GGCAGAGTTA GGTGAGAGGC AACTTTCTT ACAGACTAAG AGTTTTTAAG TACTCAAGGT 180
GATGTTTATC AGAAGCTTGG ACTGCTTCTG TGTCTTTTTA TTGTGCTTAT CTGGGAGGGA 240
GAGTTCTGTG TCTGCTCCTA TACATCTTTC TGCAGCTGCA GACATACTCC CTGAGTCTGC 300
TTTTAGCTTT CCTATCTTAG TGCACCTGAA GGGAAAGGAA TGAGCTTAAT AAGGCCCACT 360
GTTTTACTGG GGCCCATGTG ATGAGAGTGA AGTTTGGCAG TTACCCAAGA GACGTTCCCC 420
TCACCTCCCT CCGGCGCTCG AG 442

```

(2) INFORMATION FOR SEQ ID NO:306:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 412 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

```

GAATTCGGCC TTCATGGCCT ACCAATATGC AAATCAGTAC CTCTTCTCTT AGAGGTGTTT 60
ATGCCCAAGC TCCTCAGACA AGTCCATCCC ACTGTGTGGG AGGAAGTTGA AGGGTGAGGA 120
TTTTTAAGAT TTTTATCTTG CTGGAAGTTG TGAAGACTCA ATGACAAATG GCTAGGTTTT 180
GAAGGGGTCT TGGAAGTCAT TACTGGGGAT AGACCCTCTT TGATACTTGT CACATTAAATA 240
TCTGCCCAGA CTCTCACACA TTCAGATGTT TAACGTCACA TGCATTAAAT TCTTTTGGTT 300
GCATGAGACA GTGATGCACA GAACTCACT TAGGAAAGGA GATAGGTGGC AATAAAGAAA 360
ACAGGGATTT CATAGGAATG CAGTAAAAA AAAACCATGG CCTAATCTCG AG 412

```

(2) INFORMATION FOR SEQ ID NO:307:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 239 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

```

GGGGTTGTCT GAGGCCCAGA GGTGCTATAA GGGCCGCTCT ACGGTGTCCT GGGGCCCGGG 60

```

```

CTTGGCCCTT GTTGCAGAAG GGTTGAGGAG CCGGGCTGGG CCCTGCGCAC CTCCCGGGGC      120
AGCTCGCCCT GCTTGGCCAG CTCTCCCAT AGCTGCTCCT TCCGCCTGAG CTTCTTGGCG      180
TTGGGGACCT GGTGGGCGAG GACGTCTTTG GGGGAGGGA CTTTGGATGT GTTCTCGAG      239

```

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

```

GCGCACCATC CTGGGAAGTG CATGTCTCAG ACCAACTCCA CCTTCACCTT CACCACCTGT      60
CGCATCCTGC ATCCTTCAGA TGAGTCACT CGGGTCACAC CAAGCCTTAA CTCAGCCCCA      120
ACTCCAGCTT GTGGCAGCAC CAGCCACTTG AAATCCACGC CGGTGGCCAC ACCATGCACT      180
CCACGGAGAC TGAGCCTGGC TGAGTCCTTC ACTAACACCC GTGAGTCCAC GACCACCATG      240
AGCACATCCC TGGGGCTCGT GTGGCTGTTG AAGGAGCGGG GCATTTCTGC TGCCGTGTAC      300
GACCCCAAGA GCTGGGACAG GGCCGGCCGG GGCTCCCTCC TGCACCTCTA CACGCCCAAG      360
ATGGCTGTGA TCCCCTCTAC TCCGCCGAAC TCGCCTATGC AGACACCCAC ATCCTCCCCA      420
CCCTCCTTTG AGTTCAAGTG CACGAGCCCT CCCTACGACA ATTTCTGGC TTCCAAGCCA      480
GCCAGCTCCA TCCTGAGGGA AGTGAGAGAA AAGAACGTCC GCAGGACCTC GAG          533

```

(2) INFORMATION FOR SEQ ID NO:309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

```

GAATTCGGCC AAAGAGGCCT ACCCTAAAAC ATTTATTTC AAGGAGAAAAG AAAAAGGGGG      60
GGCGCAAAAA TGGCTGGGGC AATTATAGAA AACATGAGCA CCAAGAAGCT GTGCATTGTT      120
GGTGGGATTC TGCTCGTGT CCAAATCATC GCCTTTCTGG TGGGAGGCTT GATTGTCCA      180
GGGCCCCACAA CGGCAGTGTG CTACATGTCG GTGAAATGTG TGGATGCCCG TAAGAACCAT      240
CACAAGACAA AATGGTTCGT GCCTTGGGGA CCAATCATT GTGGCAAGAT CCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

```

GAATTCGGCC AAAGAGGCCT AGGGTTTAAG AGCTGTGGAG GACTGAAAAC TGGATAAAAA      60
GGGGTCCCTT TTCCTTGCCC CTGTCTCTCA CTCAGATGCG CTTCTTTTTC GCCACTGTTT      120
GGCAAAGTTT TCTGTAAAGC CCCCAGTTCT CCAGGTGCGT TACTATTCTT GGGATCATGG      180

```


GGTCAGTTTT AGGACACTTG AACACTTCTT TTCCCCCTC CCCAGTTCTC CAGGTGCGTT 240
ACCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:311:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

GAATTCGGCC AAAGAGGCCT AGGTAAATAA CTAATATTGA TGTATTTTA TATTTAATA 60
 TAGACTAGTA AACTATGCAG AGTTAAGTGT TACATTAGAA TCTTGAATC TCCTAACATT 120
 TCTCTTCCTC AGTTTCCTAT TGTTTTGGTA GAGTATGTAG ACATTTGCGA GATTAATTAA 180
 GAGTTGGTAG ATACATTCTG GATTTCAATT TACTTTAGAT AGCAGGTTTG GCACTTTAAA 240
 TATATTTAAT TCAGTAAGAG AATAACTGAG TATGAGCTGT ATCCTCATCT TACTGTTGAA 300
 GACATCCCAA ATAGTTGGGT GTGCACTGTG GCGGGATCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:312:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 268 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

GAATTCGGCC AAAGAGGCCT ACGGGGAGGC GCGCCCGCGC TGAGTCGGCG GCGGGTAGCC 60
 ACTCCATGCC CTTGTCCGAT GGTTTGCAAC TCCGATTTTG CACACCGCTC CACCGTGCCC 120
 CCCAGCGCAC ACCCATTCAC ACTCAGCCA AACTCTCGC TGAACACTTT TATAATTGTT 180
 AGGCGTGGCC GTTGGGACTT TGGGCGCAGC GCGGCTGATA CTGCGTCTGG AGGATTGATA 240
 TTACTTTTG CATTGCGGTT ACCTCGAG 268

(2) INFORMATION FOR SEQ ID NO:313:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

GTCTCTCGCC GCCGGAGGAA GATGANGCTG AAGATTGGAT TCATCTTACG CAGTTTGCTG 60
 GTGGTGGGAA GCTTCCTGGG GCTAGTGGTC CTCTGGTCTT CCCTGACCCC GCGGCCGGAC 120
 GACCCAAGCC CGCTGAGCAG GATGAGGAA GACAGAGATG TCAATGACCC CATGCCCAAC 180
 CGAGGCGGCA ATGGACTAGC TCCTGGGGAG GACAGATTCA AACCTGTGGT ACCATGGCCT 240
 CATGTTGAAG GAGTAGAAGT GGACTTAGAG TCTATTAGAA GAATAAACAA GGCCAAAAAT 300
 GAACAAGAGC ACCATGCTGG AGGAGATTCC CAGAAAGATA TCATACTTCT CGAG 354

(2) INFORMATION FOR SEQ ID NO:314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCGGCC AAAGAGGCCT AGTGCAAGAA CATGAAGCAC CTGTGGTTTT TCCTCCTGCT      60
GGTGGCAGCT CCCAGATGTG TCCTGTCCCA GGTGCACCTG CAGGAATCGG GCCCGGGACT      120
GTTGAAACCT TCGGACACCC TGTCCCTCAC CTGCTTTGTC TCGGGTTACT CCCTCAGTAG      180
TGTTCACTAT TGGGGCTGGA TCCGCCAGTC CCCAGGGAAA GGACTGGAGT GGATTGGGAA      240
CATCCATCAC AATGGTAGAA CCAATTACAA CCCGTCCCTC GCCAGCCGCG GTTCCATCTC      300
AGCCGACACG TCCAGAAGCT CCCTCTCCCT GAATCTGACC TCTGTGACCG CCGCAGACTC      360
GGCCGTCTAT TTCTGTGCGA GCGGCCCTAT TGCCTCCTTT GAATCGACGA CTCTAAAGGT      420
GGGCGGAGAC TTCACTCTCT GGGGCCAGGG AATCCTGGTC ACCGTCTCCT CAGCATCCCC      480
GACCAGCCCC AAGGTCTTCC CGCACAGCCT CGAG                                     514

```

(2) INFORMATION FOR SEQ ID NO:315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

```

GAATTCGGCC AAAGAGGCCT AGGACACTAG AATTATTAGT GTTCATTTTC ATCTAAGATC      60
TTTATTCTCT AACGTTCTTG GTCCTATTGA AACATTGCAG TATGCAAAAC TACTGCAATG      120
TTAAACCCAA GAGAAAAGCC ATTATCATGT GTATGCTGGT CATCATGATC AGTGTGGTAC      180
AATTTTTTAA AATAAATAT CATGCCCTTC TCGAG                                     215

```

(2) INFORMATION FOR SEQ ID NO:316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 788 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

```

GAATTATGTA CGCCCTCTTC CTCCTGGCCA GCCTCCTGGG CGCGGCTCTA GCCGGCCCCG      60
TCCTTGGAAT GAAAGAATGC ACCAGGGGCT CGGCAGTGTG GTGCCAGAAT GTGAAGACGG      120
CGTCCGACTG CGGGGAGTGC AAGCACTGCC TGCAGACCGT TTGGAACAAG CCAACAGTGA      180
AATCCCTTCC CTGCGACATA TGCAAAGACG TTGTCACCGC AGCTGGTGAT ATGCTGAAGG      240
ACAATGCCAC TGAGGAGGAG ATCCTTGTTC ACTTGAGAGG GACCTGTGAC TGGCTTCCGA      300
AACCGAACAT GTCTGCTTCA TGCAAGGAGA TAGTGGACTC CTACCTCCCT GTCATCCTGG      360
ACATCATTAAG AGGAGAAATG AGCCGTCTCG GGGAGGTGTG CTCTGCTCTC AACCTCTGCG      420
AGTCTCTCCA GAAGCACCTA GCAGAGCTGA ATCACCAGAA GCAGCTGGAG TCCAATAAGA      480

```

TCCCAGAGCT	GGACATGACT	GAGGTGGTGG	CCCCCTTCAT	GGCCAAACATC	CCTCTCCTCC	540
TCTACCCCTCA	GGACGGCCCC	CGCAGCAAGC	CCCAGCCAAA	GGATAATGGG	GACGTTTGCC	600
AGGACTGCAT	TCAGATGGTG	ACTGACATCC	AGACTGCTGT	ACGGACCAAC	TCCACCTTTG	660
TCCAGGCCTT	GGTGGAACAT	GTCAAGGAGG	AGTGTGACCG	CCTGGGCCCT	GGCATGGCCG	720
ACATATGCAA	GAACATATATC	AGCCAGTATT	CTGAAATTGC	TATCCAGATG	ATGATGCACA	780
TGCTCGAG						788

(2) INFORMATION FOR SEQ ID NO:317:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 214 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

GAATTCGGCC	AAAGAGGCCT	AAATCATCCT	GATGATGGTT	TTCTTACATA	AACATGAGCT	60
TCTGACCATG	TACCATGGAT	GGTTCTCAC	TTCTTGCTAT	ATCCTGATCA	TCACTATTGC	120
AAATATTGCA	AATTGGCCA	GTA CTGCTAC	TGCAATCACA	ATCCAAAGGG	ATTGGATTGT	180
TGTTGTTGCA	GGAGAAGACA	GAAGCAAAC	CGAG			214

(2) INFORMATION FOR SEQ ID NO:318:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

GTGTCTTTT	TTCCCTTTA	TAGCTGCTGG	AGTGAATTTT	AGAAAGCCTA	AGTCATACAT	60
CACATTGCTT	CATGGGCATC	CCAGTACACT	TGGATTTTA	TTTACATCC	TTACTGATCT	120
GATTCTCATC	TCTGTCTCTT	CATGGTTCTC	TGCCCTCTAG	TTACACTGGT	GACCTTTCAA	180
AACCTTTACC	ACATTGAGTT	CATTCCCTAC	TTTTCACCT	TTCTCTGCCT	GGAGTGTCT	240
GCCCCATCTT	TACGTGGCAC	GCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:319:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

GAAGCTTTCA	GGCTATCTTC	TAGTCAAGAT	GAGTGATAAG	CCAGACTTGT	CGGAAGTGGA	60
GAAGTTTGAC	AGGTCAAAAC	TGAAGAAAAC	TAATACTGAA	GAAAAAAAT	ACTCTTCCT	120
CAAAGGAAAC	TATCCAGCAA	GAGAAAGAGT	GTGTTCAAAC	ATCATAAAAT	GGGGATCGCC	180
TCCCAACAGC	AGATTTCGAC	ATTACCTGAG	AGTCTTGATT	TTAGGCTTGT	TTTTGTAA	240
CCCATGTGTT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

GCTGCGTGTG ATGGAGACCA AACCCGACAA GGCAGTGTCC ATCATTGAGT GTGACATGAA	60
CGTGGACTTT GATGCTCCCC TGGGCTACAA AGAACCCGAA AGACAAGTCC AGCATGAGGA	120
GTGACAGAA GGTGAAGCCG ACCACAGTGG CTATGCTGGA GAGCTGGGCT TCCGCGCTTT	180
CTCTGGATCT GGCAATAGAC TGGATGGAAA GAAGAAAGGG GTAGAGCCCA GCCCCTCCCC	240
AATCAAGCCT GGAGATATTA AAAGAGGAAT TCCCAATTAT GAATTTAAAC TTGGCGCGCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:

GAATTCGGCC AAAGAGGCCT ACTCTTACAC CTTCCGCTCC GTGGGCACCT TCAATATCAT	60
CGTCACGGCT GAGAACGAGG TGGGCTCCGC CCAGGACAGC ATCTTCGTCT ATGTCCTGCA	120
GCTCATAGAG GGGCTGCAGG TGGTGGGCGG TGGCCGCTAC TTCCCCACCA ACCACACGGT	180
ACAGCTGCAG GCCGTGGTTA GGGATGGCAC CAACGTCTCC TACAGCTGGA CTGCCTGGAG	240
GGACAGGGGC CCGGCCCTGG CCGGCAGCGG CAAAGGCTTC TCGCTCACCG TGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

GCGCCGTGTC CTTTTCGTT GGTACCAGCG GCGACATGAC GGGGTACACT CCGGATGAGA	60
AACTGCGGCT GCAGCAGCTG CGAGAGCTGA GAAGGCGATG GCTGAAGGAC CAGGAGCTGA	120
GCCCTCGGGA GCCGGTGCTG CCCCCACAGA AGATGGGGCC TATGGAGAAA TTCTGGAATA	180
AATTTTGGGA GAATAAATCC CTTGGAGGA AAATGGTCCA TGGGGTATAC AAAAAGAGTA	240
TCTTTGTTTT CACTCATGTA CTTGTACCTG TCTGGATTAT TCATTATTAC ATGAAGTATC	300
ATGTTTCTGA AAAACTCGAG	320

(2) INFORMATION FOR SEQ ID NO:323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```
GCAAAAATCT CAGGCCCCAG AAAAGCCTCT TGTCTCTCT CAGATGGGTT CCAAAAAGAA    60
GCCCAAAATT ATCCAGCAAA ACAAAAAGA GACCTCGCCT CAAGTGAAGG GAGAGGAGAT    120
GCCGGCAGGA AAAGACCAGG AGGCCAGCAG GGGCTCTGTT CCTTCAGGTT CCAAGATGGA    180
CAGGAGGGCG CCAGTACCTC GCACCAAGGC CAGTGAACA GAGCAATA AGAAAGGAAC    240
CAAGGAAAGG ACAAATGGTG ATATTGTTCC AGAACGAGG GACATCGAGC ATAAGAAGGA    300
ACTCGAG
```

(2) INFORMATION FOR SEQ ID NO:324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```
GCACTTCTGA GAGGATGCTG GGAATCTGCA GGGGAGACG GAAATCTTG GCTGCCTCGT    60
TGAGTCTTCT CTGCATCCCA GCCATCACCT GGATTACCT GTTTCCTGGG AGCTTCGAAG    120
ATGGAAGGCC CGTGTCTCTG TCACCGCTGG AGTCCCAGGC ACACAGCCCC AGGTACACGG    180
CCTCCAGCCA GCGGGAGCGC GAGAGCCTGG AGGTGCGCAT GCGCGAGGTG GAGGAGGAGA    240
ACCGCGCCCT CCGCAGGCAG CTCAGCCTGG CCCAGGGCCG AGCCCCACCC ATCCTCGAG    299
```

(2) INFORMATION FOR SEQ ID NO:325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

```
GAATTCGGCC TTCATGGCCT ACTCCAAACT CATGCCCTTG TTTTATCTC TGCCCTTGGA    60
TGGCTGTCTT CTATTTTCAC TCACAATTC AACACATTTT GACTTGCTCG TGTCACCTAG    120
GGTTTCCGCC TCAGGTATGT CTTCTTCCTT AATTTCTTTG CCGTCTTTGG TGCTGTTGAC    180
CTCACCTTTT CTGGGTCTT CCTATTGGTC TCAGCTTCAG GTTTCAGCC GCCCTGGTT    240
TCCTGAACAT TCCTTCTGTG GGTCTTCCC CTCCTTCTCA CCCACCCTCG AG    292
```

(2) INFORMATION FOR SEQ ID NO:326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

GAATTCGGCC	TTCAGACTTG	AAGTGGAGAA	GGCTACGATT	TTTTTGATGT	CATTTTGTGT	60
AAGGGCGCAG	ACTGCTCCGA	ACAGAGTGGT	GATAGCGCCT	AAGCATAGTG	TTAGAGTTTG	120
GATTAGTGGG	CTATTTTCTG	CTAGGGGGTG	GAAGCGGATG	AGTAAGAAGA	TTCTGTCTAC	180
AACTATAGTG	CTTGAGTGGG	GTAGGGCTGA	GACTGGGGTG	GGGCCTTCTA	TGGCTGAGGG	240
GAGTCAGGGG	TGGAGACCTA	ATTGGGCTGA	TTTGCCTGCT	GCTGCTAGGA	GGAGGCCTAG	300
TAGTGGGGTG	AGGCTTGGAT	TAGCGTTTAG	AAGGGCAAAC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC	TTCATGNCT	ACCTTTCCGT	CCGTTCTTTC	ACGCCTTCCT	CCTCATTTTC	60
CTTCCTTCTA	TTTTCCCTTC	CCTCTTTCCG	CTTTCCTGCC	CGTTTCCCTT	CCTCCCTCCC	120
TTCTCTCTTC	CTTCCTTCCT	CTGCGTTCTT	CCTCTCTCCT	TTGTTCTCTC	CTCCTCTCTC	180
CCACTCCCTT	TTCTCTCCT	CTTCCCACCC	CAGTCTCCTA	CTCCCCAGTC	CTCCCATCCC	240
CATGGAACAT	ACACCTGCTT	TGTCTGGGAG	CCACGTTATT	CCTGCCAGCC	AGACCTGGGC	300
CAGGAGGATC	AGGGTCACCG	TCAGCTTGGG	CCGAGAACCC	TCACATGAG	ACAAGCTCCT	360
CTGCCAGGGT	TTCTGTGGG	AAAGGCCCCA	CTTCCCGACC	CTCCTGGGCC	ACTGCATGGG	420
GTCCCTCTT	CGGCTTCTT	TCCCTCTCC	ACCCGGCAGC	CCCCCAGCT	CGAG	474

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

GAATTCGGCC	AAAGAGGCCT	AATTTACTCC	CCAATATAAA	ACATTTTACC	TGCGATCTAT	60
GTGTACATAT	TGAATGATGT	GTAACAATAT	CATAATTTTT	ATGTTCTGCA	TTTTTTCACT	120
TATATATCTT	TATTTAAATG	GACTTAACTT	TACTAATGGA	GTAATTTTTA	GCTTTCAGAA	180
GGAGTTCTCA	CTCGAAGATA	AAGAACAGCT	CGCTAACCCAC	GAAAGAGGAA	TCGATGCTCA	240
GCTTTTAGTT	GCACTTCCTA	AAGTTGCAGA	ATTAAGACAA	ATCTTTGAAC	CAAAGAAGAA	300
AGAATTCTTA	GAAATGAAAA	GAAAAGAAAG	AATTGCCAGG	CGCCTGGAAG	GGATTGAAAA	360
TGACACTCAG	CCCATCCTCT	TGCAGAGCTG	CACAGGATTG	GTGACTCACC	GCCTGTGGA	420
GGAAGACACC	CCTCGATACA	TGAGAGCCAG	CGACCCTGCC	AGCCCCACA	TCGGCCGATC	480
AAATGAAGAG	GAGGAAACTT	CTGATTCTTC	TCTAGAAAAG	CAAACCTGAT	CCAAATACTG	540
CACAGAAACC	CTCGAG					556

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

GAATTCGGCC	AAAGAGGCCT	ACAAAACCAT	CCATAAATAA	ACAAAGCTAA	GAAAGCTAAG	60
AAACAAAGCT	AAGAAACAAA	GACTGAGGTG	AGGGAGATTT	GAGTATTTTT	TTTTCTCTTA	120
CCAACAAGTG	AAGAATTGAA	CACCTTAATC	CATCTGATCT	CCCAGGTGGA	AGCCACAAAT	180
CTTTTTTTTT	GTTTTGCTCA	GCATATTGGC	ACAGTGAGAA	ATTCATTTTA	TACTCTCTGG	240
CATCTCTCTT	GTAAACTCAC	CAAGTCTCAA	TAAGTTCACA	AAGAAGGCAG	AGACAAATAA	300
CCCTAGAATG	CAGGTGATTG	TTTATTTATG	TATTTTCCTT	GTTACATACC	CACCTATACC	360
CAAGGCCTTT	GCAGAAAAGC	TCGAG				385

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 696 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

GAATTCGGCC	AAAGAGGCCT	AGGAAGCAGG	AGTTTATTTT	TATCCTTTTG	TAAGTATTAA	60
CTCGGTAAATC	ACAACAAACA	CGGAGCAATC	TCAATGCTGT	TTATCCGGAG	GACAGTCTGC	120
GGGGTCGTGA	CGATTCTTTT	CTTCTGAAG	TTTTTCCTTT	TCCTGAATCT	CATAATGATT	180
CTTGGCCATG	ATTCTGTCTT	TTCAATGACT	GTGGCTTCTA	CTCGAACAAAG	ATCCTTTCCG	240
AGGAGTGGCT	TGCCAAGCAG	CGTGAAGTTG	TCTGCCCCAA	CCAGCAGGAC	CTTCTCCAGT	300
CGAATTCTCT	CTCCACACGC	AAGGTCTAGT	TCATTTCCAA	TTAAGATCAG	GTCTTCAGAG	360
GTCACCTTCC	ACTGGCGGCT	GGCAAAGTGC	ACCACGGCAA	AGAGCCTGCC	ATACTGCCCC	420
GTGACGATCA	TCTCATTAC	TTTCTTCACG	ACCTCTGCAT	GGTGTCTGGT	CTCCTCAACT	480
GGGTCTGGCA	GAACAACTTC	TGGCCAAGGT	GGTGAATCA	GGGATGTTTT	AGGAACATAT	540
CCTGGTAGAT	ATGAAGTGCT	CTGTGAATTG	AACCTTCGAG	AAGCAGACCA	AAGGGAGGCT	600
GCTCCGGGCC	CCGAAGGTCT	CAGGATGCTG	TGGCTGCACG	CGGACGCCAG	CCGCCCTAAG	660
GTGACCGTCA	GGGAAGATGC	TGCCATGGCC	GCCGCC			696

(2) INFORMATION FOR SEQ ID NO:331:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

GAATTCGGCC	AAAGAGGCCT	AATTTTTTGT	ACATCTGGGC	CCTTAGTTTT	TATTCTGTTT	60
ATTATATGTC	TCTGTCTCTC	TCTATTGTGT	GTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	120
GTGTGTGTGT	GTGGTGACAG	AGTGCCACCC	CCAGGGCCCT	GTCAACCTCT	CTTTTCTCCT	180
CCATGGCTGT	CTGCCTGCGT	ATCTGTCTCT	GAGAATCCTC	GGGGCGGTCA	GGGGATGTCA	240
GGAGGGGAAG	GAGCGGCCCT	CCCTATCTTG	CTGCTCCTCT	TGGCACTCAG	GGGCACCTTC	300
CATGGAGCCA	GACCGGGTGG	AGGGGCTTCT	GGGATTGGT	GTCTGTGCT	GCCAGAGCAG	360

GAACCCCCAG TACTCGAG

378

(2) INFORMATION FOR SEQ ID NO:332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

```

GAATTCGGCC TTCATGGCCT ACATGGGAT TATTGGTGCT GTGACCATGG CTGGCATCAT    60
GGCGGCAGAC AGAAGTGAAT CACCTAGTTT GACCCAAGAG AGAGCCAACC TGAGCGATGA    120
GCAGTGCACA CAGGTGACCT CCTTGTGCA GTTGGTTCAT TCCTGCAGTG AGCAGTCTCC    180
TCAGGCCTCT GCACTTTACT ATGATGAATT TGCCAACCTG ATCCAACATG AAAAGCTGGA    240
TCCAAAAGCC CTGGAATGGG TTGGGCATAC CATCTGTAAT GATTTCAGG ATGCCTTCGT    300
AGTGGACTCC TGTGTTGTTT CGGAAGGTGA CTTTCCATT CTGTGAAAG CACTGTACGG    360
ACTGGAAGAA TACGACACTC AGGATGGACT CGAG                                394

```

(2) INFORMATION FOR SEQ ID NO:333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 547 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

```

GAATTCGGCC AAAGAGGCCT ACTTATTTTC CTGTGAAAAT GCCTACCACA AAGAAGACAT    60
TGATGTTCTT ATCAAGCTTT TTCACCAGCC TTGGGTCCTT CATTGTAATT TGCTCTATTC    120
TTGGGACACA AGCATGGATC ACCAGTACAA TTGCTGTTAG AGACTCTGCT TCAAATGGGA    180
GCATTTTCAT CACTTACGGA CTTTTCGTG GGGAGAGTAG TGAAGAATTG AGTCACGGAC    240
TTGCAGAACCC AAAGAAAAAG TTTGCAGTTT TAGAGATACT GAATAATTCT TCCCAAAAAA    300
ACTCTGCATT CGGTGACTAT CCTGTTCTCTG GTCCTGAGTT TGATCACGTC GCTGCTGAGC    360
TCTGGGTTTA CTTTCTACAA CAGCATCAGC AACCCCTTACC AGACATTCTT GGGGCCGAGC    420
GGGGTGTAAC CCTGGAACGG GCTCGGTGCA TCCTTCGTTT TTGTGACCAT GATACTGTTT    480
GTGGCGAACA CGCAGTCCAA CCAACTCTCC GAAGAGTTGT TCCAAATGCT TTACCCGACT    540
CCTCGAG                                547

```

(2) INFORMATION FOR SEQ ID NO:334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

```

GAATTCGGCC TTCATGGCCT AGGGGAAATT GAGTCAAGAA AAGGTTCAAT ATTTTAAAT    60
GGTAGAATTG ACCGTATGTG TATGTGCTTC TAGAAGTGAT TCAGGAGAGA GGGTGGAATG    120

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GATGGTGTGG GACGGAGGGA AGAATTGGTG GAATGATGTT GGCAAAAAGG AATAGGCTTT 180
 TGTGCATAAG TTGAGGGATT GGCCTTGCCT AGAAACATGG ACAATTCGTC TATAGTAAGA 240
 AGAGAAAAGG TAGATCTATG ACCACAGACA TAGTCAGATA ATCATTTTAA AATTCTTTAA 300
 TCAATAGATG TTCTGTATGT ATGGCAGGCA GTAAGCTAAG CAGTTTACAT ACCTGATTTC 360
 ATTTAGTTAT TATAACAATC CCAGTCTAAA ACTCGAG 397

(2) INFORMATION FOR SEQ ID NO:335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

GAATTCGGCC TTCATGGCCT ACTCCATCCT TAAGGTCACC ATTGGTATGT TCCTGCTCTC 60
 TGGAGATCCC TGCTTCAAGA CGCCACCATC GACTGCCAAG TCCATCTCCA TCCCAGGCCA 120
 GGATTCCTCC CTGCAGCTGA CGTGTAAAGG TGGTGGGACC AGCAGTGGGG GCAGCAGCAC 180
 CAACTCCCTG ACTGGGTCCC GGCCCCCAA GGCTCGGCCC ACTATTCTCA GCTCAGGGCT 240
 GCCAGAGGAA CCCGACCAGA ACCTGTCCAG CCCTGAGGAG GTGTTCCACT CTGGCCACTC 300
 CTCGCAACTC GAG 313

(2) INFORMATION FOR SEQ ID NO:336:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGCCTCC CAAAGTGCTG 60
 GGATTACAGG CTTGAGCCAC CACACCTGGC CTAGTGATTT GTAATTTTCAT GAGCTGTTGC 120
 TGTATTGCCT TCCACAGACA GTCAATTTAT AATCCCTCAG TATTATATAA TCAGGAAGAT 180
 TCAGTGAATG GAATTTTGGG TTGGTGGAGG ACATATTTTT TAATTGGTAG ACCACTGAGT 240
 GCTTTTGCAA ATCTCCTTAA ATCACAATTAC AGCAGGAACA ACTATAGAAA ATACAATTAT 300
 TTAGGAGCAA CCTGATCTGT GAGCTAATTT AATGAGTGGA GCCCAGCCTA CATGCTGAAG 360
 AGCTCACATG CCTCCTACCT AGTTCCTTAA CTAGGTTTTC ACTCATGCCC ATTTTGTCAT 420
 ACTCTTGAAA CCTTCCTATC TTTGCATAGA ACATTATTCT TTCCACT 467

(2) INFORMATION FOR SEQ ID NO:337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

GAATTCGGCC AAAGAGGCCT ACTTCTTTGA AGAACCATGA AGTCACACTA TATTGTGCTA 60

```

GCTCTAGCCT CCCTGACGTT CCTGCTGTGT CTCCCCGTGT CCCAGAGCTG TAACAAAGCA      120
CTCTGTGCCA GCGATGTGAG CAAATGCCTC ATTCAGGAGC TCTGCCAGTG CCGGCCTGGA      180
GAAGGGAACT GCCCCTGCTG TAAGGAGTGC ATGCTGTGCC TCGGGGCCCT GTGGGACGAG      240
TGCTGCGACT GTGTCGGTAT GTGCAACCCT CGGAATTACA GCGACACCCC GCCCACATCC      300
AAGAGCACCG TGGAGGAGCT GCACGAGCCC ATTCGCTCCG CTGTCGAG      348

```

(2) INFORMATION FOR SEQ ID NO:338:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

```

GAATTCGGCC TTCATGGCCT AGCCAGTCTT CAGTTATAAC CACTCCACCC TCCTCACTTT      60
CTCTCTCTCT CTCTCTTTTT TTTTTTTTTT TTTTGTGCTA TGGGATTTAA TGGGAAAAAT      120
ATGTAAAAAC TGTCAGTAGT CAGCTGGCTC TTTTTCCTAT GAAATCTATC AGTACCTTTC      180
TCCATCCGTT GTTCTCAATA ATGACCACAG AGCCTGAGTA TACCAAGAAA ACCAATATTC      240
GCATTACAGG TCACTCGAG      259

```

(2) INFORMATION FOR SEQ ID NO:339:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 183 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

```

GAATTCGGCC AAAGAGGCCT AGCCTTCTGC AAGATGCTTC TGATTCTGCT GTCAGTGGCC      60
CTGCTGGCCT TCAGCTCAGC TCAGGACTTA GATGAAGATG TCAGCCAAGA AGACGTTCCC      120
TTGTAATAT CAGATGGAGG AGACTCTGAG CAGTTCATAG ATGAGGAGCG TCAGGGACCA      180
CCT      183

```

(2) INFORMATION FOR SEQ ID NO:340:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 264 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

```

GAATTCGGCC TTCATGGCCT AGTTTAACT GAGTGCAACA AGTATTTTCG TTAAGAGATT      60
TTTTTCGTA ATTTACCATT CTGCTGAATC AATTTTAAAT CCAGTTGGAA GCTCTAAAAT      120
TCTAACATAA TTCAGAAGCA TTAAGAAAGA AGACTAAGGA AGAGAAAGCT ACATTTTAT      180
TTCAGCTTGT ATTGCATTGT GCAGAAAGGA AAATAGTCTA GCTAATTAC TTTTCTATG      240
AAAAACCTTA GAAGGCTCCT CGAG      264

```

(2) INFORMATION FOR SEQ ID NO:341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

```

GAATTCGGCC TTCATGGCCT AGCCTTTCTA GTCTTCCCTC TTCTGTAGGA ATANCATGTT      60
CCTCAAATGG TCCTGAACCT TTTCAACATT TTGGTGAACC CTTTAAAGT AAATTACTC      120
AATGCTTTAA AATTCATAGT CTTAAATAA ATGTGAATTT TGTTCAGG TATTTATTCT      180
GGGGTACAAA AACTTCCAG AATTACAGT AGGAAAGGAA ACCCCTTAT GATGTGGCTT      240
ATTATTACAA GCATTACAG ATGATGCTGG CTAAGTCAA TCATTCCTTG AGACAGTGAT      300
TCCTAAATGT AATGCCGCT TCCTGAACTC TCACATATTC TATATCATGG TTATTTTAAA      360
AAATATATTT TTAGCCTTTT GTAACTTAG TCTTGTTTTG AGCAATCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

```

GAATTCGGCC TTCATGGCCT AGGGATTATA GGTGTGAGCC ACCGCGCCCG GCCAGGAATC      60
ATTTTATCC AGGTAAGGCA TACAGAACCG GAGGGTTCTT GTCTAAGTTG TACCATGAAT      120
GTGTGCTCAG TGGCTACTTT GAAATAGACT TACTGTACAA TCCTTGAGCA GGAATGAAAA      180
TAAAGCTGG AAATCACGGG TTGCTCTGGG GTTTTCAGGA AGGTGTCGCT CGTCTGGGGT      240
GAGTGTCTC CTTTCTCANG GGATTTCATG TGGCATTATT TTGTTTTCAT CTGAGAGGCA      300
ACATAAGCTG GGAGGGAAGG GCTGCAAAGA GGGGGCCAGG ACAAATGTGT ACCTGGGGGC      360
CCCCATTTTG ACTCCACCCT GAGCTGGGGC TGGGCCACAG GAGGGCAGAG GGAACACTTT      420
GGGACGGGGA GGGAGCCCTT GACTGAAAG AATGGGGTGA CTCGAG              466

```

(2) INFORMATION FOR SEQ ID NO:343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

```

GAATTCGGCC TTCATGGCCT AGAATTTTGG AGTCTTTATC ATAGGTAACC TGGACCACAG      60
TTACTATTTA TTGACAAATGT GATTGAGTGT ATGGAGGAAA GCACAGTGGA TGCTAGGCTT      120
TGTAATATG GGGATGTAGA AAAGCAGATA GTTCAGTGTC TACCTTTTTC TAGAACTACC      180
TTGAACCTTA AATTTTAAGT CATGTTTATT GCTAGAAAAT TAAATGTACT TATTTAAACC      240
AATGAAAAAG CACATTTCTG AAATGAAGTT AGAGATAATC TCTGTGCTT ATAAAAAGAC      300
ATTAATAAAA ATCTGGTAAG GACTCGAG              328

```

(2) INFORMATION FOR SEQ ID NO:344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

GAATTCGGCC	TTCATGGCCT	AGTGACCAGA	CATAAGAACT	CATTTTGTAGT	TAAAGCATTT	60
TAAAAAAGTA	TACAAGGCAG	AGTTGCCAAC	AATCTCAGCC	TATGAAAAGG	ACAGCTGCAG	120
TCAATGTTCC	CACTAATATT	TTCCATCCGT	GTACTGAGTG	AATTTGTAAT	GTGCAACTCA	180
TGTCAAGAAA	ATAAACAGAT	GTGCACCACA	AGCGGAACAA	CAATGAAAGA	ACTTACATAG	240
ATTTTATTATTA	AGATTGAACT	TTTGATGTTG	ATTCCACTGG	TAAGAGAGCA	CTGTAGGCAA	300
AGGTCTTGTA	TTTATAAAGT	TATCTCCTAT	TGAGGAAGAT	GAAGATGTCA	ATACTCCCCA	360
ACAGAATGCT	TTGAGCTCTT	TCTAGTAGAT	CTGTGCCAAC	TCTGAAACAC	CTCGAG	416

(2) INFORMATION FOR SEQ ID NO:345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

GAATTCGGCC	TTCATGGCCT	AGTAAATACA	AAATACAAAA	ATACTGGTGA	GAGAATGGGA	60
TGATGATTAT	ATTCTGGGTT	CAGTTTTTCT	TCCTGAGAAA	TTTGATAATA	CATCTTTTGA	120
TTTTTAATAA	GTGAAATAAC	TGGTGACTGT	GTTGTATGTG	TGTGTGTGTG	TTTTTTTTTT	180
TTTTTTTAAA	TAGAAGTGTG	AAAAGAAACT	TCATCCACGG	AAACTTCAGG	ATAATTTTGA	240
AACAGGCAAG	TCATTTCCTA	TCTTTTTATA	ATCTCTGCCT	TGTGGGATTT	GGTTTGGTTT	300
ACCTAACTTT	GATTTTAGTG	GGAGTATGTG	AGCTGTGACT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 544 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

GAATTCGGCC	TTCATGGCCT	AGCCTTCGGA	ACCCACCAG	AGTCACAGCC	AGGAAGGGCA	60
GCGGGGCGCA	CCAGGCCGAA	GGCTCACGCC	ACAGGGAGGG	CAGCTAGGAC	ATGGGGGGAA	120
GCGCGTTAAA	CCAGGGAGTC	CTGGAAGGGG	ACGACGCCCC	CGGCCAGTCC	CTGTACGAGC	180
GGTTAAGTCA	GAGGATGCTG	GACATCTCGG	GGGACCGGGG	CGTGCTGAAG	GACGTATCC	240
GAGAAGGAGC	TGGAGACCTA	GTGGCGCCTG	ATGCTTCGGT	GCTAGATGCT	TCGTCTTGGG	300
TAAACTCCTC	GACTCCCAAG	GCCCCAGCTC	CATCTTTACC	TCAGAGCCTC	CTGAACCTCC	360
TCCTCCAGCC	TCACCTTCCT	CCAGCCTCAC	CACTCCTCCC	TGGACCTGCA	GCTCCGCACC	420
CCCGGGGGCC	TCAGAACTAC	CCCTTCCAGG	GCCTCAGAAC	TACCCCTACG	GTTTCTCCTG	480

CGTAACCTTC TGCCTACCTT CCTGAGAGTG GTTGGTGACA GCAGCCGGGG CTAGAAACCT 540
CGAG 544

(2) INFORMATION FOR SEQ ID NO:347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 570 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GCCTTCATGG CCTACCCAGT GATTGTCAAC ATGGCCAGCA AGAGGAAATC CACCACACCA 60
TGCATGATCC CAGTGAAGAC TGTGGTGTG CAAGATGCCA GCATGGAGGC CCAGCCCGCT 120
GAGACCTTGC CTGAAGGACC CCAGCAGGAT CTGCCCCCAG AAGCATCTGC TGCCAGCAGT 180
GAGGCAGCAC AGAACCCAG CAGTACTGAT GGCTCTACAC TGGCCAATGG GCATCGGAGC 240
ACTTTAGATG GCTATTTATA TTCCTGTAAA TACTGCGATT TCAGATCCCA TGACATGACC 300
CAATTTGTGG GACATATGAA CTCAGAGCAC ACAGACTTTA ATAAAGACCC AACCTTTGTA 360
TGCAGTGGGT GCAGTTTCTT GGCAAAAACC CCTGAGGGGC TTTCCTTGCA CAATGCCACA 420
TGCTACTCCG GGAAGCCAG CTTTGTGTGG AACGTGGCCA AGCCAGACAA TCATGTGGTT 480
GTGGAGCAGA GCATCCCTGA GAGCACCAGC ACTCCTGACC TAGCGGGTGA GCCCAGTGCT 540
GAAGGGGCTG ATGGACAGGC AGAGCTCGAG 570

(2) INFORMATION FOR SEQ ID NO:348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT AGAAAAAAGT TTTCAAAGGG AAGTAATCTT AAATCTGTAT 60
ACTATTTTCT ATGATGGAAA TTCTGTGAAG AAACAATAAC AAATTCTCCC TGACTCCTGT 120
CTGTCCTAAT AGTAAGGTGG TCTTTCTTCT AATCTCCCA TCCATCCACC CATCAGGAAG 180
CAACAGGGTA CCTTGTGTGA GTAAGTGTAG ATTCTGACT TCTTCTCGCA CCTTCAGCTG 240
GAGCACCTGT TGTAAGATGT GCTGCCGGAG GTTCTCCTGG GCAATCCCA TTCGCTCGAG 300

(2) INFORMATION FOR SEQ ID NO:349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

GAATTCGCCC TTCATGGCCT AACAAACCACC ACCACCTGGA CGCCAGCAG CACAACCACC 60
ATAGCCGGCC TCAGGGTCAC AGAAAGCAA GGGCACTCAG AATCATGGCA CCTAAGTCTG 120
GACACTGCCA TCAGGGTTGC ATTGGCTGTC GCTGTGCTCA AAAGTGTCT TTTGGGACTG 180

CTGTGCCTCC TCCTGTGGTG GAGGAGAAGG AAAGGTAGCA GGGCGCCAAG CAGTGACTTC	240
TGACCAACAG AGTGTGGGA GAAGGGATGT GTATTAGCCC CGGAGGACGT GATGTGAGAC	300
CCGCTTGTGA GTCCTCCACA CTCGTTCCCC ATTGGCAAGA TACATGGAGA GCACCCTGAG	360
GACCTTTAAA AGGCAAAGCC GCAAGGCAGA AGGAGGCTGG GTCCTGAAT CACCGACGCT	420
CGAG	424

(2) INFORMATION FOR SEQ ID NO:350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 445 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

GAATTCGGCC TTCATGGCCT AATTAGATTA TTTGAGCTT GGAACACTT GTACATGGTT	60
CCCCGGGACA TAAATGTAGA AGTCTGTAG AGCAGTATCT TCACATTGAG GGATGTGAAG	120
GCTTTGCAGA GTATAGATAG TTTAATGTAA TTTAGAGTTC TTCATTATCT TTCCTAGGAT	180
CAGATATCTG CCGATGATGA CTCTAACCC ATTCAGAATC TTTCTATGGT ATATTGCCTT	240
GGGGTGTAAT ATCCTCCAGG ACCCTAAACA GATGGACAGT TGATGCATTT CAGGGTAAGC	300
TGTAGACAAC AATATATTTG ACCCCTGAAA CAATTCAGTA TGCTTGTCAT TTGTTAACTA	360
GAGTTATTTC AAACATAATT TTGAATAAAA AATAAATTTT AATAAATACA TGTCCCAAT	420
TATGCATATA AAAGCAATCC TCGAG	445

(2) INFORMATION FOR SEQ ID NO:351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

AATTCGGTTC ATGGCCTAAT TTTGGAATA AGAGACAGAT TTTTGTGTTT TGTTTTTTTA	60
AATAGCTGTT AACTAGTCTC ATAAGGACAA AATACAGAAA GACAGTCTT ACAGAGAAAT	120
AGAAGCAAAA AAAGGAACCA ATGGAAAATT TAAACTGAA AAATAGAATA TCTGAAATAA	180
AAAATTCACT AGATGACATA ACTGTTGAGG AAAGAGTATG TGAATTGAA GAAAGAGCAA	240
TAGAAATGTT CCATTGTAAA GAACAAAGAG AACTCGAG	278

(2) INFORMATION FOR SEQ ID NO:352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

GAATTCGCCT TCATGGCCTA CAGATTATCT TAACTGAAC TGATCAAGTA CTTTGAAAAT	60
GACTTCGAAA TTTATCTTGG TGTCCCTCAT ACTTGCTGCA CTGAGTCTTT CAACCACTT	120

```

TTCTCTCCAA CCAGACCAGC AAAAGGTTCT ACTAGTTTCT TTTGATGGAT TCCGTGCGGA 180
TTACTTATAT AAAGTTCCAA CGCCCCATTT TCATTATATT ATGAAATATG GTGTTACAGT 240
GAAGCAAGTT ACTAATGTTT TTATTACAAA AACCTACCCT AACCATTATA CTTTGGTAAAC 300
TGGCCTCTTT GCAGAGAATC ATGGGATTGT TGCAAATGAT ATGTTTGATC CTATTCGGAA 360
CAAATCTTTC TCCTTGGATC ACATGAATAT TTATGATTCC AAGTTTTGGG AAGAAGCGAC 420
ACCAATATGG ATCACAAACC AGATGGCAGG ACTCGAG 457

```

(2) INFORMATION FOR SEQ ID NO:353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

```

GAATTCGGCC TTATGGCCTA GCAGGCGCCA AGGTAACATG AACAAACAGC TGCTTGCTGC 60
CCCCAAGCTT TAGTTTCTAG TGGGCCTGGA GCAATTGTGA AGGACAATC CACCCAAGGC 120
CCAGTATTGA AGAGGGGTAG GGTGGGAGGA TTGTACATAT CGCGAACGCT TGGCAAATCT 180
CTAGATTTT TTTCTCCTA GGAATAATA ATTTTAAAA AGGCTTGTA AAAATAATAA 240
AATGTTTCAT GACAGCAGCA GATGTAAAC TCCAGTACT CCGGGCGACC TCGAG 295

```

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

```

GCCTAGACAT GATGGTGGCC ACGTGCCAGG GGACCACACC CTATGTACAA AGCAGGAGAA 60
TGATGCTCCC AGCTGAGCTG CAGGATGGGC GCTGGGCTGA CTGGAGGGGT AGACGGGGTG 120
GGGTCTGACC CCATTAGCCT TTCCCATCC AACCTGGGCC CCCATAAGCC ATTCTCTGGC 180
CCTCTGCACA AGACAGACTC AGCAAATCTG CGAGGTATGG GGATTCTGCC AACTCCCCAC 240
CTCGCCTCAC CTTCCCTAGS TCTGCGCGTT AGGAGATTCT GGAGCCAGAG GGAGAGACCC 300
CAGAACTCC CCGGTGCGCG ACCCAGCCCG AGACGCCTGG GGTCCCAAGG GAAGCTGAAC 360
GCCCGCAGAA TGGGGAAATG GAGAGAGAAC CTGAAAGAGC CCCTGTAAC TCGAG 414

```

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

```

GAATTCGGCC ATCATGGCCT ACTCCCGAGT AGCTGGGACT ACAGGCATGT GCCACCACGC 60
CCAGCTAATT TTTTGATTTT TTTTGTAGTAG AGATGGGGTT CCACCATGTT AGCTAGGATG 120

```

```

ATTTCGATTT CCTGACCTTG TGATCCGCCC GCCTCGGCCT CCCAAAATGC TGGGATTATA 180
GGTGTGAGCC ACCACGTGGC CTCATTTTCAT TCTTTCATGT GGATAGGCAG TTGTTCCAGA 240
AGTATATAGT GAGGAGCTTC TTCTTTCTCT AATGATCTGC AATGTCACCT TCATCATTTA 300
TGAAGGTTCG ACATATACAT GGAATTTT TAGTCTGGCA TTAAATGTTC TTCAAAAGAG 360
TTCCTGCAAA CGTTTTTGTT TTTATTTCTT ACTGTTCCT TCACGTACTC TCTACTGAAC 420
TAAACTCTCT AATGTGTCTC GAG 443

```

(2) INFORMATION FOR SEQ ID NO:356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTC AAGAGCAGCC CACCTGTTCA GTATTCATAC 60
CCACATATCC ATAATAGAGC TCTTCTCTTC CCCCGGGTTC CTCTGCCTCA GCCTTTTCCT 120
CTTAGCAGAT GCCATCTGCA GGGCCACTTG GCTGCCCGTA GCAGTAACCG CACAGTCTTC 180
CACATTTACT CCCTCAGCCT CAGCTGCTCC TGCAGCCCAG GCACTGTCTC TGTCTCTGCA 240
TTGCTCAAGC CTCCACCATC TCGGTTACAC CCCACAGCCA CTCGAG 286

```

(2) INFORMATION FOR SEQ ID NO:357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```

GAATTCGGCC TTCATGGCCT ACTGCCTTAG CCTCCCAAAG TGCTGGGATT ACAGGCGTGA 60
GCCACCATGC CCAGCCCTAT AGTAGTTCTT CTTTGGCCCC TTAATATCCT CACCCACATG 120
TCCTGTACCC TGCCCTGAACC CTCCTCCTCT TTTGTTCTG ATCTTTGAGC TCCCTAGAGC 180
CCATAATTCT TTAGAGCAGG TATGTCCCGA GTCTGAAACA TGCCCTTATT TGTCCCAAGC 240
TCTGGACATT TCTACCCCA TCTCTCGAG 269

```

(2) INFORMATION FOR SEQ ID NO:358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```

GAATTCGGCC TTCATGGCCT ACCAAGGAAG CCTTTCTGTT TTTGGCCCAA GGAGCGTCAA 60
TAAGATCTTT GAAAATACTT TGAAGTCATT TTGTGTGTGT GTATGTGCAT ACACACCTGA 120
TTTGTTTTAT TTTTATTTT TATTTTTGA GTTAGGGTCT GGCTCTGTCG TCCAGGCTAG 180
AGTGCAGTGG TGTGGTCTCA GCTCACTGCA ACCTCTGCCT CCCAGGCTCA AGCCGCCCCC 240

```


CCACCTCGAG

250

(2) INFORMATION FOR SEQ ID NO:359:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

```

GAATTCGGCC TTCATGGCCT AATGGGAGAT TGGTGGGAGT AGGGAACACA AAAGGCATGG      60
GAAAAGAAGA TAGGTTGTAT TTTGGTCATA CTGACACCAA CATGCCTAAA GGATAGCCCT      120
GTGAAAAAAG CTAGCAGACA GTTGAAGTGC GGCTGTGAAA CAGGAAGCCG TGAGGGCTAG      180
ACTCATCGTT GTAGTCATTG GTAAAGAGTA AATACTTGGA GCTATTGTAG .TAGATGGTAT      240
CACCACGGAA CACTCGAG                                     258

```

(2) INFORMATION FOR SEQ ID NO:360:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

```

GAATTCGGCC TTCATGGCCT AGGAAGCCAC AGGTCGGCTC TGCATTAGCA GGAGCAGCCG      60
CCCTCGCTGG CCGGGGGCTC CTGGGGTTTG TCCAGCTTGA TGTCGATCAT CCCTTCTTTG      120
CTTTTCTCCT GGACATTCTC CATTCCGGGT AGAGCCGACG CCACACGTCG AAAAAGCTGC      180
TTCACGTTGT AGCCAGTCTT CGCACTGGTC TCAATGAACA TGACGCTCAG TTCTTTGGCG      240
CGCTGCCCCC CCCCTCGAG                                     259

```

(2) INFORMATION FOR SEQ ID NO:361:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 422 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

```

GAATTCGGCC TTCATGGCCT AAAGATTAGC CTGGGTAACA TAGTGAGACC CTGTCTCTAT      60
TAAAAAATAA TAATAAAAAT AACATTACAA TTGGTATTGT TCACTAAGGT ATTGGTTGTT      120
AAGGCATTCA TTAAGGTATT GTTAAAACTT GTGTTAAGCA TGTTAAAGTC TCAGTAACTT      180
TGGGATAGAA ATAAATGTG ATAAAAAGCT GAAAGAAACC ACCACAAGGG AGAGTCCTTT      240
TTGAAATATT AGAGACATAA TGCTGTCTAA TAAAAAACGA CATCAAAGAA AAATCACT      300
ACAGTGACTG CAGACTTAAT GTTGCCCAAC CATGCATCCT CCCTAGAAAT GCATTTGAAT      360
TTGATTTACT AATCTTTTAT TTAGGAAATT TACATTTTTA CATTAGTGAG ATTGGCCTCG      420
AG                                     422

```

(2) INFORMATION FOR SEQ ID NO:362:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 288 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GAATTCGGCC TTCATGGCCT AGTTATTCTT CTAATAGCTC AGCTACTTTT CCTTAAATA   60
TCTTTTCTC TGCAAAGCCT TCATATAATT GTTGTATTATTA TAACAGTGAT GATGACTGCC   120
ACTCATTACA ACTGCTGTTG TTAATCTTTG TTGTTATTTT AAACCATATG TTATTTAAAC   180
CATAAACTGC ATCATAAAAG CAGTTTCTTT CTAATCCATG ATGACACCTG CTAGCCAGGT   240
ATCGTATCAA TTCTTCACAG GTCTATTGAA TTCTAGACCT GCCTCGAG                288

```

(2) INFORMATION FOR SEQ ID NO:363:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

AAAAATTCA ACAAATCCTG AAGTCTTCT GTGAAGTGAC CAGTTCGTAA CTTGAAGAT   60
AAATAATTGC TGTAATTCC TTTTGATTTT CTTTTCAG GTTCATGGTC CTTGGTAATT   120
TCATTCAATGG AAAAAAATCT TATTATAATA ACAACAAAGA TTGTATATT TTTGACTTTA   180
TATTTCTGA GCTCTCCTGA CTTTGTGAAA AAGGGTGATG AAAATGCATT CCGAATCTGT   240
GAGGGCCCAA AACAGAGACT CGAG                264

```

(2) INFORMATION FOR SEQ ID NO:364:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 260 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT AGACCCTCAT CAATAGATGG AGACATACAG AAATAGTCAA   60
ACCACATCTA CAAAATGCCA GTATCAGGCG GCGGCTTCGA AGCCAAAGTG ATGTTTGGAT   120
GTAAAGTGAA ATATTAGTTG GCGGATGAAG CAGATAGTGA GGAAAGTTGA GCCAATAATG   180
ACGTGAAGTC CGTGGAAGCC TGTGGCTACA AAAAATGTTG AGCCGTAGAT GCCGTCGGAA   240
ATGGTGAAGG GAGACTCGAG                260

```

(2) INFORMATION FOR SEQ ID NO:365:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 332 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

GCGCCTATCA	CAAGCAGATC	ATGGGTGGCT	TCAAGGAGAC	GAAGGAGGCT	GAAGATGGCT	60
TCCGCAAGGC	CCAGAAGCCT	TGGGCCAAGA	AGATGAAGGA	GCTGGAGGCA	GCCAAGAAGG	120
CCTACCATTT	GGCTTGCAAA	GAGGAAAAGC	TGGCCATGAC	ACGGGAGATG	AACAGCAAGA	180
CGGAGCAATC	GGTCACACCT	GAGCAGCAAA	AGAAGCTGCA	GGACAAAGTG	GACAAAGTGA	240
AGCAGGATGT	GCAGAAGACA	CAGGAGAAAGT	ATGAGAAAGT	GCTGGAAGAT	GTGGGCAAGA	300
CCACACCCCA	GTACATGGAG	AACAACTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

GAATTAACAG	AGTTTTTCAGA	ATTAGAATAC	TCAGAAATGG	GATCATCGTT	CAGTGTCTCT	60
CCAAAAGCAG	AATCTGCCGT	AATAGTAGCA	AATCCTAGGG	AAGAAATAAT	CGTGAAAAAT	120
AAAGATGAAG	AAGAGAAGTT	AGTTAGTAAT	AACATCCTTC	ATAATCAACA	AGAGTTACCT	180
ACAGCTCTTA	CTAAATTGGT	TAAAGAGGTT	GAAAGTTGTGT	CTTCAGAAAA	AGCAAAAGAC	240
AGTTTTTAATG	AAAAGAGAGT	TGCAGTGGAA	GCTCCTATGA	GGGAGGAATA	TGCAGACTTC	300
AAACCATTTG	AGCGAGTATG	GGATCTCGAG				330

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 200 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

GCGATTGAAT	TCTAGACCTG	CCTCGAGTAC	GGAGCGAAAC	TCTGTCTCAA	AAAAAAAAAA	60
AAAAAAAAAA	ACCGAGTATA	AAAGGCATTT	TTTTCCTTTA	AACTAAGTAA	AATATAATGT	120
TGAATAGTTC	TATTTTGCTT	AACGGGCTTT	TGTTATTTGT	TTTGTGTAGA	AATGGCATTT	180
TTTCACATAG	AAATCTCGAG					200

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 368 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

GAATTCGGCC	TTCATGGCCT	AGAGAAATGA	GGAAAAAGAA	GGAAGAATAT	TTAACTTTTA	60
GTCCTCTTAC	AGTTGTAATA	TTTGTGGTCA	TCTGCTGTGT	TATGATGGTC	TTACTTTATT	120
TCTTCTACAA	ATGGTTGGTT	TATGTTATGA	TAGCAATTTT	CTGCATAGCA	TCAGCAATGA	180
GTCTGTACAA	CTGTCTTGCT	GCACTAATTC	ATAAGATACC	ATATGGACAA	TGCACGATTG	240
CATGTCGTGG	CAAAAACATG	GAAGTGAGAC	TTATTTTCT	CTCTGGACTG	TGCATAGCAG	300
TAGCTGTTGT	TTGGGCTGTG	TTTCGAAATG	AAGACAGGTG	GGCTTGGATT	TTACAGGATA	360
TTCTCGAG						368

(2) INFORMATION FOR SEQ ID NO:369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

GAATTCGGCC	TTCATGGCCT	ACATTCGGAG	AAGTTGAAAG	AATTACACCC	AGAACACCCA	60
TGTCTACCAT	GTTACTACAT	TTGTGTGTGT	GTGTGTGTGT	GTGTGTGTGT	GCGTGTGCAA	120
TTTAAATTAC	AATGGTCGAG	GAAGCTCTTG	CTGAGAAGGT	GATGTTGAAT	AAAGACTCTA	180
AAGACCCTAA	AGAGTTGAGA	GAGAGCTGTG	TGGAGTTCTG	GGGCCCAGGC	ACAGCAAGTA	240
CAAAGATCCT	GAAGCAGGAG	CATTCTTGGT	GTGTTCAAGG	AAAGCAGGAC	AACCTCGAG	299

(2) INFORMATION FOR SEQ ID NO:370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

GAATTCGGCC	TTCATGGCCT	ACCGCCTTTC	CATTATGCAA	CTGTGGTGGC	TTTCTTTTG	60
TTATACGACG	ATTATTTGTC	AACCCCACTA	TCTTTGCACT	CAACCATGGG	CCCCCTGGGC	120
TCAGAGACCT	CGTGACAGTC	ATCTTCTCAT	CACCACATCT	GCAAATGTGT	GGGTGGATGG	180
GGCAGCAACA	GTCCACCTCC	TCCAAGAAGC	AGTCCCTGAT	TTTCTCTCCC	CAGACAAATC	240
TTCGTCTCTC	TGTTCTTGGA	AACTCAAAGA	ACTAAGCACC	TCCCTCGAG		289

(2) INFORMATION FOR SEQ ID NO:371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

```

AATTCGGCCT TCATGGCCTA CAAGCTCGAT CATTATCCTT CTGTGAGTTA CCATCTGCCA    60
AGTTCATCCG ACACCTCTT CAATTCTCCC AAGTCGCTCT TTCTGGGAAA AGTTATAGAA    120
ACAGGGAAAA TTGACCAAGA GATTCAAAA TACAACACCC CAGGATTAC TGGTTGCCTC    180
TCCAGAGTCC AGTTCAACCA GATCGCCCTT CTCAAGGCCG CCTTGAGGCA GACAAACGCC    240
TCGGCTCAGC TCCACATCCA GGGCGAGCTG GTGGAGTCCA ACTGCGGGGC CTCGCCGCTG    300
ACCTCTCTCC CCATGTCGTC CGCCACCGAC CCCTGGCACC TGGATCACCT GGATTCAGCC    360
AGTGCGGATT TTCCATATAA TCCAGGACAA GGCCAAGCTA TAAGAAATGG AGTCAACAGA    420
AACTCGGCTA TCATTGGAGG CGTCATTGCT GTGGTGATT TCACCATCCT GTGCACCCTG    480
GTCTTCCTGA TCCGGTACAT GTTCGCCAC AAGGGCACCT ACCATACCAA CGTTCTCGAG    540

```

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

```

TCGACCCCTG GCTAATGACA AACTATGTGA CCTTCATGGT GGGGGAGATT CTGCTCCTCA    60
TCCTGACCAT CTGCTCCCTG GCTGCCATCT TTCCCAGGCG CTTCCTAAG AAGCTTGTGG    120
CCTTCTCAAC TTGGATTGAC CGGACCCGCT GGGCCAGGAA CACCTGGGCC ATGCTCGCCA    180
TCTTCATCCT GGTGATGGCA AATGTCGTGG ACATGCTCAG CTGTCTCCAG TACTACACGG    240
GACCCAGCAA TGCAACGGCA GGGATGGAAA CGGAGGGCAG CTGCCTGGAG AACCCCAAGT    300
ATTACAAC TA TGTTGGCGTG CTGTCCCTCA TCGCCACCAT CATGCTGGTG CAGGTCAGCC    360
ACATGGTGAA GCTCACGCTC ATGCTGCTCG TCGCAGGCGC CGTGGCCACC ATCAACCTCT    420
ATGCCTGGCG TCCCCTCTTT GATGAATACG ACCACAAGCG TTTTCGGGAG CACGACTTAC    480
CTATGGTGGC CTTAGAGCAG ATGCAAGGAT TCAACCCAGG GCTCGAG                    527

```

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

```

GGCAAGAAAG GATGTCCGCA CAGCTGGCTG CTGCTGAGAG CAGACAAAAG AAGCTGGAAA    60
TGGAGAAGCT TCAGCTACAA GCCCTTGAGC AAGAGCACAA GAAGCTGGCT GCCCGCCTTG    120
AGGAAGAGCG TGGCAAGAAC AAGCAGGTGG TCCTGATGCT GGTCAAAGAG TGCAAGCAGC    180
TCTCAGGCAA AGTCATAGAG GAGGCCCAGA AGCTCGAAGA CGTAATGGCC AAAGTGGGAA    240
AGGAAAAGAA AAAGACGAAT GAATTAGAAG AGGAACTCTC CGTGAGAGAA CGAAGAAGCA    300
CAGAAATGGA AGCTCAGATG GAAAAACAAC TCTCTGAGTT TGACACTGAG CGGGAACAGC    360
TTCGTGCCAA GCTGAACCGG GAAGAAGCAC ACACCACAAA CCTCGAG                    407

```

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

```

GAATTCGGCC TTCATGGCCT ACTCTGTTTT CTCCTGGAC TTATGTGCTT CGTCTGGAAT    60
GTTACATCTC TTCCTCTCTT TCTTTTTTTT TGGTCCCAT GTTGACTGTT TTATTGGGGT    120
TTCCTGGATAT CTCGGGGCCA CCTCACAGGA AGCGGTTTGC AATGAGATCA TAAACATTGC    180
CGAAAAATCT GTTCATTACT GCAGCACTGT TTCTCATCCC CTTGACTTTC ATCACAAGGT    240
ATCCCCTTCT GACAATAAAT CATCTTTAAT CATTTCTCAG CAACCTCAAG CCCAGCAGCG    300
AAGAGTCACC CCCTATCTCG AG                                         322

```

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

```

GAATTCGGCC AAAGAGGCCT ACCTAAACCG TCGATTGAAT TCTAGACCTG CCCCAAAACC    60
AACAAGGAGA ACAAGCTCAG TCTTCTGTGT CTTAATTTTT GGCTTTACTC TTAGCCCTGC    120
CCCATTTCTT AGGCTCTCCA CAGTCCAGCC GCTTTGAGCT ACTTTTCCTT CCCTGATATG    180
TGCAGCTCTC TCACCTCTGA GCCTCCGCAC CTGCTGTTCC ACAGCACTCT CCGCATTGCC    240
TTCTCCCACT GTGGCTCACT GCTGAGCTGT GTTCAGGCCC TTTGGGAAAC CCTCTCTTTC    300
ACTCCTTTTC CCTGGTCTGG CTGGGAGCC CATGCTTACC CCTGTCAGGA CACCTTGAAA    360
CCCAGCAGTG AAAACATGAC ACTTCCTTGT CTGGCTGATT TTCTTAGTGA AGCGAGTAGG    420
AGTTTCCTTT GTCAGGACTT CAGCAAGCAA AATTCAGGAG AGGTCATAAA ATGTCTCGAG    480

```

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

```

GAATTCTAGA CCTGCCTCGA GTAACCAGAG AGTCTGTCA ACATTAACAC TAGCAGTATT    60
TCCAACACTT TATTTTTTTA ACTTCCTTTA TTATACAGAA GCAGGATCTA TGTTTTTAC    120
TCTTTTGGCG TATTTGATGT GTCTTTATGG AAATCATAAA ACTTCAGCCT TCCTTGGATT    180
TTGTGGCTTC ATGTTTCGGC AAACAAATAT CATCTGGGCT GTCTTCTGTG CAGGAAATGT    240
CATTGCACAA AAGTTAACGG AGGCTTGGGA AACTGAGCTC GAG                                         283

```

(2) INFORMATION FOR SEQ ID NO:377:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

```

GAATTCGGCC TTCATGGCCT AAACAGCAAA GAACAACTCA TCACCGCTCA CGTTCAGTAT      60
CTCCTCATCG CGGCAATGAT CAGGGAAAGC CGCGTTCACG TTTACCAAAT GTGCCATTAC      120
AGAGGAGTTT AGATGAAATT CATCCAACAA GAAGGTCACG TTCTCCAACC AGACACCATG      180
ATGCCTCCCG AAGTCCAGTT GATCATAGAA CCAGAGATGT GGATAGTCAG TATTTATCAG      240
AACAAGACAG TGAGCTTCTT ATGCTGCCCA GAGCAAAACG AGGACGAAGT GCAGAATGCC      300
TACATACTAC CAGAATGTCT CGAG                                         324

```

(2) INFORMATION FOR SEQ ID NO:378:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

```

GAATTCGGCC TTCATGGCCT ACTGAAATTT CAATAAAACC AGCTTGAAAG TTCCATTACT      60
AGAAAGATAA GAGTGGTCAG AAAACATTTT TTATTAACCT ATTTCATCTA GTAAGAGTAT      120
CTTAAATGTT TTTTCTCTTG AGTACTGAAT ACACATGCAG GACAATGGAC CTAATACAG      180
TTAACTTTTG TTTTCACTC CTTTGCITTT GCATTGTCAA TAGTCCGTA AGGTTTAGGT      240
TCTATCAGAA GTACTCAGAC ATGCAGTGGG CAATCGATAA TTTCTACCTG GGCCTTGGAT      300
GCTTGACAA CTGCAGGGGC CATGGAGATT GCTTAAGGGA ACAGTACTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:379:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

```

GAATTCGGCC TTCATGGCCT AGTCTGTGTG TAGTGGAAAC TCTATTGCCT GCCCTGCACA      60
TCTGCTCCTT TTCTTCTCTG CACTCTGGGA CAGCTTCTAA AGTTTGTTCA ACATGTCATT      120
GACTGAGTTT TGTATCATTT CAGTTCTGCT CTTTACTGGT TCCTATGTGG ATGCTAATTA      180
TGCAAATGCA TTTTCCACCT CTTGCACTCC TTTTCTAAG TCACCTCACT TCTCATTTCC      240
TCATGTTTTT CCNTTATCCT CTTCTCTCGA G                                         271

```

(2) INFORMATION FOR SEQ ID NO:380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

```

GAATTCGGCC TTCATGGCCT AACGCGGCCA GCGGATTCGG TGAAGCGATT CCTGCAGGCG      60
TTGGTTCCCC TCTTTGACCT GGTACAAAGA ATTTTACGTG AAAGATTTTG TCGTCAGAGT      120
CCACATAGTA ACCTATTGGG AGTGCAAGTA CAATACAAAC ACTTAAGTGA GCTGCTGAAA      180
AGAACTGCTC TCCATGGAGA GAGTAACTCT GTCCTTATTA TCGGACCCCG AGGATCAGGA      240
AAAACATATG TAATAAATCA TGCTTTGAAA GAACTCATGG AAATAGAAGA AGTGAGTGAA      300
AATGTATTAC AAGTTCACCT AAATGGACTG CTGCAGATCA ATGACAAAAT CGCCCTAAAG      360
GAAGTCTCGA G                                     371

```

(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

```

GCAGAGTTAA GCAAATTAAT TATAGCTATC TTTAAGCTAT AAATGTGTTA ACATGTATAT      60
ATACCATTTA TTATGTTCTA CTTTAGTGAT ATACCTTAAT TTAGTGGGCT TTGGCAGGGC      120
GGGGGAGGGG GAACGTTTAT TAATCTCTGA GGAAAACAAA ACCTGTTTTT TACTTGAGTC      180
TAACATATGG TCCCAATTTA TTAATACTTC TGTTAAATTT GATGTCAGGT CAACATTTTT      240
CAGAAATGTA TTTATTCTCA GAAACAGAAC ACTCGAG                                     277

```

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

```

GAATTCGGCC TTCATGGCCT AGTTGTTACT GGAGTTAAAG AGAGAACTGA GAAAGACAAA      60
GGAGTAGAAC GTTTACTCAA ATAAGTAATA ACAGAAAACCT TTCCAAACCA GAATATACAG      120
GTACAGGAAG GTCAAGGGTC ACCAATCCGA GTTAACTCAG ACAAGAATAC TCCAATTAC      180
AAACTCATAA GGGTCAAAGA CAAAGAGAGA ATTTAGAAAA CAGCAGGAGA ATAGAAGCAA      240
ATAACATATA AGATAGATCC AATATGCTTG GTAGCAGATT TCTCAGCAGG                     290

```

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

```

GAGAGTGTGG AGAGGGTACA TTTCCCTTGT ATNCTATGTT CTTCTTTCTA GTGGGTCTCA      60
TGTAGAGATA GAGATATTTT TTTGTTTTAG AGATTCCAAA GTATATATTT TTAGTGTAAAG      120
AAATGTACCC TCTCCACACT CCATGATGTA AATAGAACCA GGAATAAATG TGTCTTTGTG      180

```


ATAATCCCAT AGCAATTTAT GGTAAGAACAA AGACCCCTTT CCCTCACCAC CGAGTCTCGA 240
G 241

(2) INFORMATION FOR SEQ ID NO:384:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 299 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

GAATTCGGCC TTCATGGCCT AGAAACACAA TAAAGCCCCA CAACAGCAAA CTTTTTAAAC 60
 GACGAAAGAG AGCTCTAAAT AACAGCAAAA TGCTGCTCTT CTGCTCCCA TTATGTTTAC 120
 TATTACTGTG CTCTAGTGAG AATAGCAAGG GGTCAAAGGA ATTTATAACA CTTCTATATAC 180
 CTTCAACTTA CCAAGTCCCC TACCAAGTAA CAGTTTTCTG TCAGAGAGAA AGTTCTGCCC 240
 TCCCTGCTCA AAGGTGTCCA TGCCAAC TAGTCTCCCTG TAGCTACCTG GGTCTCGAG 299

(2) INFORMATION FOR SEQ ID NO:385:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 546 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

GAATTCGGCC TTCATGGCCT AGAAAGAGGT GGCAGAAGGA ATGGTAGGAA GGGGAGGATG 60
 TAAGCGATAT CATCAAGTCA GAATCATGAG TTCTTGGTGC CCGGATGTTA GAGGAGGGAA 120
 AAGGTGAAGA TGGCTGAAGC TGTACACTTT CATGATGGTG GAATGGAGGG GTCCCTTGGG 180
 AATTAGGGGT GTCTCTAGGA AGAACCAGCT TAGGGTACAT TGAGAAAGAG GAGACAGGCT 240
 AGGCAGGTCT AGAATTCAAT CGCAGATCAC AGCTACAAGG ACCAGGCCTT TGATACTCTG 300
 AGCCTCGATA GCTCTGATAG CATGGAGACC AGCATCTCTG CTTGCTCACC AGACAACATC 360
 TCTAGTGCCA GCACTTCAAA TATTGCTAGA ATAGAAGAAA TGGAGAGACT TTTGAAGCAG 420
 GCTCATGCAG AAAAGACGCG GCTGCTCGAA TCCAGGGAAC GGGAAATGGA AGCCAAAAAA 480
 CGAGCCCTGG AAGAAGAAAA ACGACGCCGG GAAATCCTGG AAAAACGATT ACAGGGATAG 540
 CTCGAG 546

(2) INFORMATION FOR SEQ ID NO:386:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

GTAGGATCA TACATCATAG GTGTATGTTT AACTGTTCAA GAAACTGCCA AACTGTTTCC 60
 CAAAGTGGTT GTATTGTTTT ACATTCCAC GAGCAGTGTT TGAGAGCTCC AGTTCTTGCA 120
 CATCCTAGCC AAAAAAGGT TCTGTTTTTT AAAGACAATT TTTTITTTCT TTGAGAGTTT 180

CGCCCTAGTC GCCCAGGCTG GAGTGCAGTG GTAAGCGAAT CCCTGCTACA GGCCAGAGAC	240
TGTTCTCAGT TGGTTTTTAC ACCAAGTATC GCACTTCATT CTAACACTCC ACCATTTTAC	300
AAATGAGATT TCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:387:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 234 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

GAATTCGGCC TTCATGGCCT AGGTCAGGTT AGTCAGCTAA TGGATAAGAG ACTTGAAATT	60
ACTCTTTTGG GATTAGCAAA TAGAAGGGAA AAACATGATA AGGGCACAGA GCGGTGGGTC	120
TGGGGGAAAA AGCAGAGGCA CAGTTTGAAA AAAATGTGTA AGAGACTGAC TAGGTAAGAT	180
ATGGTCACAG TTCATAAGTC CTTTGAATTC TAGGATTAAA AAGGTGAACT CGAG	234

(2) INFORMATION FOR SEQ ID NO:388:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 294 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

GAATTCGGCC TTCATGGCCT ACTAGATAAG TGTCAATTCC ATCTGCTTCT GATTTCACAC	60
GTCAC TGCC ACTGTGATCT TCTGCCCCCA TCTGAGTGCC GCATACTCAG	120
CCTTGTCCT GCATCAGACC CCGGCCCAGC ACAGTAACGA GAATGGGCTT CCTAAACACA	180
AATCTGATT GTTCCGCCTT CCACTTCCTA GTGGCTTCAT TCTCGTGCCC TCACTCAGGG	240
CCCTCACACA TGCTGTTCC TGCACCTCCG ACACCCTTCC CAGCGCCCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:389:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 215 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

GAATTCGGCC TTCATGGCCT AAGCAAAGCT AAGTGTAATA CTAAAAAGCA GTTTGTTGCA	60
ACTGGTCATA AAAGTGATTA AATCTAAAGC TGGCATTAAAT AAGGAAGCAA GGTAATAAAA	120
CAAAAATATA AACAGCTTTG AGAAAGTACA CCTAATAACA AAATCTTGTA ACACAACAAA	180
TGAAATCAC AAAAAATATA AGGAGACTCC TCGAG	215

(2) INFORMATION FOR SEQ ID NO:390:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```
GAATTCGGCC TTCATGGCCT AGAAAAACAC TATAGTCACG CAAGTAATGA CCCTTCTTAT   60
CCTCAACCCC CAGCATATAT GCACAAGGAC AAACAGTATA CATACAATCT CACCTGAGAG   120
ACGTCCTCAG ACTTGTGTTG AAACCTTATC ATGCTGCATT ATCTCCCTTA CAACATCCTT   180
CCTGCCTTGT TTCTCATTTT CACACTATAC GGAGTAAAAA AATATACAAT TTCTATATAT   240
TATATATATA ACCTCCATAT ATTTTATACT ATTTTCATATT TTTATACTAT CAGATTAATG   300
TTTTATATT TATCTATCAT TTAAATATG CTATGTAAAG CATCTACAAA ATTGGTCACC   360
ATTCCTATGG GAAGTATCTG CAGAACTCTA GAAATGAATT CATCTTTTGC TTACCCCTCC   420
CTTTTGTAGG GGACAGGGAC TTTCTTCTTT TCCCTCATCT TCATCTTCCC CCTCGAG   477
```

(2) INFORMATION FOR SEQ ID NO:391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```
GAATTCGGCC TTCATGGCCT AGTTAGTCAG AGTGAAATAT TCAATAATGA GTGGTGCAGC   60
CTTGGGACTT GAGATTGTTT TTGTCTTTT TCTGGCATT TTTCTGCTTC ATCGATATGG   120
AGACTTTAAG AAACAGCATA GACTTGTGAT TATTGGAACA CTGCTTGCTT GGTATCTCTG   180
CTTTCTTATT GTCTTCATAC TGCTCTGGA TGTTAGTACG ACAATATACA ACCGGTGCAA   240
GCTCGAG                                     247
```

(2) INFORMATION FOR SEQ ID NO:392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```
GAATTCGGCC AAAGAGGCCT AGTCATCTGC ATTTATTATG AGCAGCAGGT GGGCACTTC   60
CAGCAACAGT AAAAAAAGT AATTACAAA AGCAGGTTTC AGTGAAGCCA TCTGGTTGTT   120
ACCCCTGGGT GCTCACAGT AGATGCCAAC CCAGAGCAGC AGGAAGAGGA CTCCAAGGCC   180
CATGAAGAGT GAGGCCACTA AGGAGATGAG GAGCTCTTTA TAGATATCAC GAGTGTACTT   240
GGTAGAGGTG ACCTCGTAAA CGAAGAACCA GGCGGTGAAG AACATGCCAA TGGCCAAAAG   300
CACCACGGTC AGATGGGGGA AGACAGCTGG GTTCACTGGG CTGGTATATC TGCTCATGGC   360
CTCGAG                                     366
```

(2) INFORMATION FOR SEQ ID NO:393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

```
GAATTCGGCC AAAGAGGCCT ACCCTGGGTT AACATTCAAG ATGGTACATG CTGAAGCCTT      60
TTCTCGTCCT TTGAGTCGGA ATGAAGTTGT TGGTTTAATT TTCCGTTTGA CAATATTGTT      120
TGCAGTGACA TACTTTACTA TCAAATGGAT GGTAGATGCA ATTGATCCAA CCAGAAAGCA      180
AAAAGTAGAA GCTCAAAAC TCGAG                                         205
```

(2) INFORMATION FOR SEQ ID NO:394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

```
GAATTCTAGA CCTGCCTCGA GCCGGAGATG GANAAGAAAG TCAGCCTACT CAAGGACAAT      60
AGCTCTCTGG AATTTGACTC TGAGATGGTG GAGATGGCTC AGAAGTTGGG AGCTGCTCTC      120
CAGGTTGGGG AGGCACTGGT CTGGACCAAA CCAGTTAAAG ATCCCAAATC AAAGCACCAG      180
ACCACTTCAA CCAGCAAACC TGCCAGTTTC CAGCAGCCTC TGGGCTCTAA TCAAGCTCTA      240
GGACAGGCAA TGTCTTCAGC AGCTGCATAC AGGACGCTCC CCTCAGGTGC TGGAGGAACA      300
TCCCAGTTCA CAAAGCCCCC ATCTCTTCTT CTGGAGCCAG AGCCTGCGGT GGAATCAAGT      360
CCAAGTGAAG CATCAGAACT TCTCGAG                                         387
```

(2) INFORMATION FOR SEQ ID NO:395:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

```
GAATTCGGCC AAAGAGGCCT ATCGAGAAGC CTTGTTTATT TAATGTGAGT TTGTGCCTTT      60
TTGTCTCAAT CTTCCAATAC AGGTATATTG AGAAAAAAG CAGTCTAATA AAATCCTAGA      120
CAGAACTTTC TGGAGTCCAG TTTGGTGATG TCCATTTTCC AGCTGTATGT ATCCTCAAAC      180
TTGCACTGAT AACCGCCATT TTACCAGGGC AGGATTAGGA AGAGGTACAA AGGTGTGTCT      240
GAAAATTTTT GCACGTGGAT TTCTGCATAT AATAGTCCCG TGTCAGTTTA CTTATGCAAA      300
CATTGACAT CTGAATTGTA ATTGGGCCGT TTCCTACTGA CAGGATGTCC TTTTGCTTTT      360
GTCTGCCTCC TCTTCACATC TTCCTCTTTA TCCACCCTGC AGCCGGGGGG CGGGGGAGAC      420
CGGATCCCAG GCAGGACAGT GGCTAGGCTG CGTGTCCCCA CCCCCGACCC TCGTTTGACC      480
CCTGGGAGCC GGGGCGAAGA CAGCACAAGG ACGGAGCCCT CGGATCCCTC ACGAGTGGGG      540
CAGAGGCTGC GGG                                         553
```

(2) INFORMATION FOR SEQ ID NO:396:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 472 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

```

GAATTCGGCC AAAGAGGCCT ACAAGGTTAC TTGACCAAGA TGGTGACATT GTAAGATTG      60
AACAAAGGAA ATGTGACTTC AGAGTCATGG TTGTAACTA TGCTATGAAG TAGGAAAACT      120
TTATGAGGTC TTTTAACTC AAACAGTCGA GTTTAAAGT GAGGGTTAGC AATGATGAAT      180
GAGTGGCCAA AAAATGTATT CATATTTTTA GTCTTCTTA GAATTACTGG TAGTTGTGCA      240
CAACTAGAGG GTATTATTT GTGTGTGTAT GTGTCGTGTG TGTACGAGTG CTGGAATAC      300
TCTGCCAGTT TACAGTAGAG GCAGGCTTAC ATAATTCAGT CATGAAAGCT GAGGCTTATA      360
GTTAGAGGG GATCGTCCTC TTCTTAATGA GTCTGTAAGT TACAAAAATA ACTTTTTTCT      420
TTATTTACTA ACTGTTGGT TTTTAATATT AAAATATTAG GTGCTTCTCG AG              472

```

(2) INFORMATION FOR SEQ ID NO:397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

```

GAATTCGGCC AAAGAGGCCT AGATTGGGG ACATTCTTCT TTAGAAGGAA AAGAGTCTAA      60
TTAGTGGATA TTAAGTAAT AAATAATACA TACTATCAAA TATTATGAGA GTCACATGAA      120
CCATGAAGTC TTCACTTAAT TTAGGAGAAA TGGGGAATAT TTTCTATCAT TCCTGATAAC      180
AGAACTAGAT ATTTCAAGAT CATAGTCATG GAATGTAATC CATAATACCA AACAGGGTGC      240
TTTACTTTGA AGCCATTGAC CATTAAATTT GATTGTTAGT AGCACAGGCT ACCAAAAAAT      300
AGCAAGGAAT ATGGTATCCA CACAGATCTC GGCTGGCCTC AAGTAATCAA AAGTGAGAAT      360
GAAACATACA TGACACAAC TGGGACCTCT GGGTTTCTGA GACGTGGGCT ACAAGATTAT      420
ATTAGGTAGA AACTAAAGG AAATGTATT CAAGCAAAAG TGGCAAGGGA ATTTACAGA      480
ACTAATTTT TAAGGAGGT AATAAAGCA GCAGTAAAA TGCATGTCCA TGTATCAGAT      540
TCCTGGAG                                         548

```

(2) INFORMATION FOR SEQ ID NO:398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

```

GAATTCGGCC AAAGAGGCCT AGGCTAAATA CCGGCACGAG ACCGATTTTC TGAAGACAGC      60
AGATTTATCA CTGTTAATCC AGCGGAAAA AACACCTCTG GAATGATAAG CCGCCTTGCT      120
CCAGGGAGGA TGGAGTGGAT CATCCCTCTG ATTGTGGTAT CAGCCTTGAC CTTCTGTGTC      180
CTCATCCACT TCTCAAAC TGGAGAACTG AAGGAGCTGC AGCTGGAGAA GCACAAGGGC      240
GAGATCCTGG GCGTGGTGGT GGTGGAGTCG GGCTGGGGCT CCATCCTGCC CACGGTGATC      300

```

CTGGCCAACA TGATGAATGG CGGCCCGGCT GCCCGCTCGG GGAAGCTGAG CATCGGGGAC	360
CAGATCATGT CCATCAATGG CACCAGCCTG GTGGGGCTGC CCCTCGCCAC CTGCCAAGGC	420
ATCATCAAGG GCCTGAAGAA CCAGACACAG GTAAAGCTCG AG	462

(2) INFORMATION FOR SEQ ID NO:399:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 428 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

GAATTCGGCC AAAGAGGCCT AGGCCGGGCA CACAGAAAAA TGCGAGGAAT AGAAATGCTT	60
GCATACTCTT GATTTTTTTT TTTTTTTTGT GTGTAAAAAA CACACCTCTC CCTCCACCC	120
CAAAAAACAT CAAATTCCTT CCTTTTCCCC AAATCCCTGG ATCTTGGAAT GAAAGCCACC	180
CTTCCCAAT CTGCTCTCAC CTCCTTCAGC CCATCCAAGT TATGCACAAA AAAACAAAAA	240
TTAGTGAGAA ATTTGGGGAT TTGCACAACA AAAAATTAGA TAATGTTTTC CAAACTAGG	300
TCTTCTATGC TGTGTCAAAA AAAGTTTCCT ACAGACTGAG GATATTACA CGACAGGAGC	360
CTGGGGGTTA AATGAGCCTT TATTAGAATG TTGTAGCAGT TGTGTTTGAA GGC GTGGCC	420
CTACAAAA	428

(2) INFORMATION FOR SEQ ID NO:400:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 269 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

GAATTCGGCC TTCATGGCCT AAGTTGAAAC TTACGAGTAA CATACTGGT GTCTGATTGG	60
TTGTCACTACT TTTCATTTTC CTCCTTTCA GATCCAATCC ATTCTACACA TTACTGAT	120
TTTTTCCTAG TGTACTGATT TCTGTTATGT CACTTTGCTG CTTAGGCTTC TTAATGCTTA	180
CTGTATCAGG TGTAACACC TTTTGCTTAC CTTTCCAGGC CTTTTTAGAG TCTTATATAG	240
CTTACTCCCA TGCTCCAACCT CCCCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:401:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 236 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

GAATTCGGCC TTCATGGCCT AGGCACTTTG AAGAGATATA GAACTCCGTG TATCACATTT	60
TCCATTTTTA TTTCATTTT TAATTGCCCA GAGCCTAATT TCTGTGGGCC TCTGCTGATT	120
TGCACATTTG AGATTCGTGT GTAAATATGC GTGTGGCATG TGTACAGGCC TGGGCCTCCT	180
TATCACAAG TGTGCTCTCT CAGTGTTTAA ATACACACAA TCCACATCGA CTCGAG	236

(2) INFORMATION FOR SEQ ID NO:402:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

```

GAATTACCTT ATACACATAG CCTGAAGGTA ATTTTATACA ATATTTCCAA TAGTTTGTG      60
CTTCAAACAA AGTTTGGGTA CATTGAACCA TCAGAAAGGA AAGGTGTCAT TGTCTCAGCC      120
ACCCATGTGG ACAATCTCTG GTTGTTTGGC ATCACTGTTG TTGCTGAGTC TGAATGTGAG      180
GAACATGCCA TTGGCATGTC TTGCCACAC ACACACCATT TTGTTATCTT TTGTGGGTGT      240
GCTTATGTGG GGAATCTGG GCGTGTGTGA AAAAAATATA TTGCAGCTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:403:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 345 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

```

GAATTCGGCC TTCATGGCCT ACTTGGGGTA CTGAGATACA TGGGGCCGAA AAGGGGTAAT      60
ATGGCCATCT TTTATCAGAA AAAGTGACAA AACGGGAATT TAAAAAATGA ATTTCCATC      120
TGACTTTATT TCCAAATACA CTTTCTTTT TAAAAACCA ATACACTTC TTTGAGGATG      180
ACAGTATTAG GAAATCCAAT TATACAAAAA ATACTACATC TAGTCTGGGG TAGATATATT      240
TATTTTGGT AACATACATT AAGTGGCACT AATTACACAG TAACTATAAG GTAACATAA      300
TGAAACCACA GAACTGTAAC TCTGCCACAG CTGCATGAAC TCGAG                    345

```

(2) INFORMATION FOR SEQ ID NO:404:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

```

GAATTCGGCC TTCATGGCCT AAAAAAAAAA AAGCCATTAA TCTAATTAAT TGTTTAATCC      60
TGCTTACAAG ATTATCTTGA AAAAAATGTC TGGGGAGTAT GGTATAATGA ATTACGGGTC      120
CAAGAATTTG GGTTCAGATA CCACCTTCAG TCTTTACTAA GCTGCGTGAC TTTAGCAAAG      180
TGCTTAGTCT CTCTAAGCTT CGSTTCCTA ATCTATGAGG AGGGCCTAAG ATATCACCAC      240
CCATCACTCG AG                    252

```

(2) INFORMATION FOR SEQ ID NO:405:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 305 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

GAATTCGGCC	TTCATGGCCT	AAGAATACGA	AATTGAGAG	GATGAATTG	ACCTTTAATA	60
TTGTGGACT	TTGTATTGA	TATCTTTCCT	CCATCACTTC	AAAATCGTCT	TGCTTGGCCT	120
CTTATTGCAA	CCACAGCTGC	AGTAGACAGT	TCCATACAAG	CTTCCAAGAA	CTTCATGGGT	180
ACATCTGGAG	AGCACCTCAC	CTGGGGCCAC	ATTCTCTACC	TTTCCTGTCT	TACTCTTCCT	240
CCTCTGGGCT	TCTTCTGGT	GCATGGGGGT	GGGGGGAGAT	ATTAAGTATT	CCCCAACAGC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:406:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

GAATTCGGCC	TTCATGGCCT	ACACAGCAAC	AACCAACATA	GCTAATACAG	AAAGCAGTCA	60
GCAGACTCTA	CAGAATCCC	AGTTTCTTTT	AACAAGGTTG	AATGATCCTA	AAATGTCTGA	120
AACGGAGCGC	CAGTCCATGG	AAAGCGAGCG	TGCAGACCGC	AGCCTGTTTG	TCCAAGAGCT	180
CCTTCTGTCC	ACTTTAGTGC	GTGAAGAGAG	CTCATCCTCA	GATGAGGATG	ATCGGGGGGA	240
GGTTCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:407:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 481 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

GAATTCGGCC	TTCATGGCCT	AAAAGAAACT	AGGTGTGATT	GGAAGGAAGA	ATCATGAAAG	60
ATCAGGGTAG	ATACTGGTGG	GGCAGCTATT	AAAGGAGTTT	GAGCAGGGGC	ATGACATCTT	120
CACATTGAAA	GCAATATGGG	AGTCGAATTA	AATTTAGTAC	CCAGTTGAGA	TAAAAGTCCA	180
TTGCCATATT	CACAGTGAGG	TGGGACAAAA	GCAGAGTCAG	AGAGATTAAG	AGGCTGGGAA	240
AGATTGAAGT	GATTTTTAGG	AATCAGAATC	CACATCAGTT	GATGACAAGT	ACAGAAGGGC	300
ACAATAGCAA	GAAGAAGAAG	TAAATGATAA	TTCCTAGATG	CCATTAGTCA	CAATCAAGTA	360
CGGAAGAGAC	ATTATTGACT	GAGGTTGAAT	CAGGGCAGAG	AAGATAATAT	ACCTGATTTT	420
GGAAGTGTG	CATGTAAGGG	GGCTTCGATT	TCAGCTACTT	ACATACTTGG	GAAGTCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:408:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 308 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

```
GAATTCGGCT TCATGGCCTA CCCGGCAATT GGCTGATCCG CAGAAACATT TCTGGGCTTC      60
TTTCCATAT CTCTGGAAGT GATAGTCAAA CGTTAACTCT GAGCCTGAAG GAACCAAGTTT      120
GGTGGTAAAA AACCCAACCC TCAGTTGTCC GTTCACAGTC CATTTTTGGG TTTCACAATT      180
TGGTTCACAG CTGTGATTCA TGAAACGAGA GCAATTTCTT TTTTGAGTGG CATCTATTAT      240
CTCATCATTC TTCAGGGCCA TGAAATAGTA ATGGATGTTT TTGTTTCGTG CATACTCCTT      300
CACTCGAG                                         308
```

(2) INFORMATION FOR SEQ ID NO:409:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 337 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

```
GAATTCGGCC TTCATGGCCT ACAATGAGGA TAATACAAAA GAGCAATCTG CCCCACTGTG      60
AGCCTGAGCT TCCCATAGTG ACTTCTCTCT CTCCAGAGGG ATCCACTCCT ACCAGTCTGG      120
AAAGCACTGG GCATACAAGC GCACAAATGC GTGGCACATA CTACAAATCC TTCTAAAGCC      180
ACTGCTGTAC ACCTGCCTCA CTTAACCATG CAGCCTCAAG GCTGTCTCAT GTCATTCTTT      240
CCTACAGCTG CAGAGTTTTC AACATATGGA CAGGTGTGCC AGGATTATAT TGACTAGTCT      300
CTTACTGATC TAGCTCACCT CCTAAATACA ACTCGAG                                         337
```

(2) INFORMATION FOR SEQ ID NO:410:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

```
GAATTCGGCC TTCATGGCCT AAAATGTGGG GATTGGGAAC CACTAGTTCT TTCAGATGGT      60
ATTCTTCAGA CTATAGAAGG AGCTTCCAGT TGAATTCACC AGTGGACAAA ATGAGGAAAA      120
CAGGTGAACA AGCTTTTCTT GTATTTACAT ACAAAGTCAG ATCAGTTATG GGACAATAGT      180
ATTGAATAGA TTTCAGCTTT ATGCTGGAGT AACTGGCATG TGAGCAAACT GTGTTGGCGT      240
GGGGGTGGAG GGGTGAGGTG GCGCTAAGC CTTTTTTTAA GATTTTTCAG GTACCCCTCA      300
CTAAAGGCAC TCGAG                                         315
```

(2) INFORMATION FOR SEQ ID NO:411:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 277 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

GAATTCGGCC	TTCATGGCCT	ACCTGAACCC	CTTACTTCGA	AGGATCATAA	GATTCACAGG	60
GGTGTTTGCA	TTGGACTTT	TTGCTACTGA	CATTTTGTGA	AACGCCGGAC	AAGTGGTCAC	120
TGGGCACTTA	ACGCCATACT	TCCTGACTGT	GTGCAAGCCA	AACTACACCA	GTGCAGACTG	180
CCAAGCGCAC	CACCA GTTTA	TAAACAATGG	GAACATTTGT	ACTGGGGACC	TGGAAGTGAT	240
AGAAAAGGCT	CGGAGATCCT	TTCCCTCCAA	ACTCGAG			277

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

GAATTCGGCC	TCATGGCCTA	GTGGTAGGGC	TGAATTCGCA	CTATAGGGTT	AGATTTTCTA	60
CTGTAGGGTT	AGATTTTCTT	AATGGTGTGT	ATATAATAAT	ATAATATTAA	TAATAATCGG	120
AGAGGGTCAA	AGAGGAGGGA	AACTGGGTAA	CCCAAAAACA	TAAGGTCCGAG	GTCCCTGTTC	180
TTCACCGGAA	AGAGGGTCAA	GGACCAAAGC	CATAGATTTG	ACTGGTAGTT	TAGTTTAGTC	240
CTGTCTACGA	AGAAGAAGAG	CGGTTGTTTG	TTTAAACAGA	TTCAAGAGCA	GGAAGCACTC	300
ATTTAGATAA	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

GAATTCTAGA	CCTGCCTCGA	GTGAGGCTTT	TAAAAACAAT	CTCATCTGTC	CCTCTAAAAA	60
TTAGCTTCCT	TTAGAACCTC	TTCTCCTTGG	CAATATATTA	GTGATACTAT	TGTTATCTTC	120
ACACTAAAGA	TTCAAACTT	TAGTTTTTGT	TTAGGAAAG	TTTTTATTT	TTACATTTCT	180
TTCATCCTTC	ATAATTACCC	AGTCATCATG	AACTTTGTAG	TTATCTATTT	CTTCATAGGA	240
ATCCTCGAG						249

(2) INFORMATION FOR SEQ ID NO:414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

GAATTGATAC	TAGGGACCGA	AGGGAACATA	GAGACTCCAG	AGACATGCGG	GACTCAAGGG	60
AGATGAGAGA	TTATAGCAGA	GATACCAAAG	AGAGCCGTGA	TCCCAGAGAT	TCTCGGTCCA	120
CTCGTGATGC	CCATGACTAC	AGGGACCGTG	AAGGTCGAGA	TACTCATCGA	AAGGAGGATA	180
CATATCCAGA	AGAATCCCGG	AGTTATGGCC	GAAACCATT	GAGAGAAGAA	AGTTCTCGTA	240
CGGAAATAAG	GAATGAGTCC	AGAAATGAGT	CTCGAAGTGA	AATTAGAAAT	GACCGAATGG	300
GCCGAAGTAG	GGGGAGGGTT	CCTGAGTTAC	CTGAAAAGGG	TAGGCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

GAATTCGGCC	TTCATGGCGT	TAAACTGTG	CCTAACAGAG	GTGTCCTCTG	ACTTTTCTTC	60
TGCAAGCTCC	ATGTTTTCAC	ATCTTCCCTT	TGACTGTGTC	CTGCTGCTGC	TGCTGCTACT	120
ACTTACAAGG	TCCTCAGAAG	TGGAATACAG	AGCGGAGGTC	GGTCAGAATG	CCTATCTGCC	180
CTGCTTCTAC	ACCCAGCGCC	CCCCAGGGAA	CCTCGTGCCC	GTCTGCTGGG	GCAAAGGAGC	240
CTGTCTGTG	TTTGAATGTG	GCAACGTGGT	GCTCAGGACT	GATGAAAGGG	ATGTGAATTA	300
TTGGACATCC	AGATACTGGC	TAAATGGGGA	TTTCCGCAAA	GGAGATGTGT	CCCTGACCAT	360
AGAGAATGTG	ACTCTAGCAG	ACAGTGGGAT	CTACTGTGTC	CGGATCCAAA	TCCCAGGCAT	420
AATGAATGAT	GAAAAATTTA	ACCTGAAGTT	GGTCATCAAA	CCAGCCAAGG	TCACCCCTGC	480
ACCGACTCTG	CAGAGAGACT	TCACTGCAGC	CTTTCCAAGG	ATGCTCGAG		529

(2) INFORMATION FOR SEQ ID NO:416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

GAATTCGGCC	TTCATGGCCT	ACTGAGCCTA	GTAATTCAAG	GCTGCAGTGA	GCTGCGATCA	60
CATCACTGCA	TTCCC GCCTG	GGCAACAGAA	GTAGACTCCA	TCTCTAAAAA	GAAGGAAAGA	120
AAAAAAGGAA	GAAATATACA	GTAATTTTAA	ACTGGGAGAT	GAAATGCTAA	TTTCTAGAAG	180
TCCATTGTGT	TTTGAAGGGT	CTCATGTCAA	AAAAAAAAAA	AAGTAAGTAA	AATAAGACCC	240
ATCCTACTGT	TTTATATACT	AAAATAGTAA	GTAAATTAAA	TGAAAATGAA	GTACATTTGG	300
GCTTTCATTT	ACCAATCCTG	GAATGTTGAA	AAGTTGCCCA	AAAGACATTT	AGCAAGACTC	360
GAG						363

(2) INFORMATION FOR SEQ ID NO:417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

GAATTCGGCC TTCATGGCCT ACCTGAAAGC CCATCTCCTC CAACTTGCAG CGCCGGTAGA	60
GCTCGTAGTG CCGGCTGTGG GTCTGCTCGC GGAGGTCTTC CATGTTCAAC CGGATCAACC	120
TGCCTCGAG	129

(2) INFORMATION FOR SEQ ID NO:418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

GAATTCGGCC TTCATGGCCT AGGAGGTGGG TATAGGGAAC ACTTGGGGAG AAATAGTGAA	60
ATCTGAATAT AGACTGTGCA TTGTATCATT TAGTATAAAT GTTGACITGC CTGATTTTGT	120
TGTTGAAGGC ACTGTGGTTA CACAAGAGAA CGTCTGTCTT CCTAAGTGAT GCATGCCAAG	180
GTTTGCAGGG GCATCCTGTC TGCAATTACT CTCAAATAGA TCAAAATAAT AATAACGTGT	240
GTGTGCATGA TGGAGACAGG GAAGAAGAAA GGAAAGGGCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

GCCAGCACAT TGTGGAACAG AAAAATGGCA AAGAAAGAGT GCCATCCTC TGGCATTTC	60
TGCAGAAGGA AGCAGAGCTG AGGCTGGTAA AGTTCCTGCC TGAGATTTTG GCCTTGCAAA	120
GGGATCTAGT GAAGCAGTTC CAGAAGCTCC AGCAAGTTGA ATACAGCTCC ATCAGAGGCT	180
TCCTCAGCAA GCACAGCTCA GATGGGTTGA GGCAGCTGCT TCACAACAGG ATCACAGTCT	240
TTCTGTCCAC ATGGAACAAA CTGAGGAGAT CGCTTGAGAC GAACAGCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GGAACCAACA GAACAACCTG TGAGGAAGAA CAAATGGCC TCTAATATCT TTGGGACACC	60
TGAAGAAAAT CAAGCTTCTT GGGCCAAGTC AGCAGGTGCC AAGTCTAGTG GTGGCAGGGA	120

AGACTTGGAG TCATCTGGAC TGCAGAGAAG GAACTCCTCT GAAGCAAGCT CCGGAGACTT 180
 CTTAGATCTG AAGGGAGAAG GTGATATTCA TGAAAATGTG GACACAGACT TGCCAGGCAG 240
 CCTGGGGCAG AGTGAAGAGA AGCCCGTGCC TGCTGCGCCT GTGCCAGCC CGGTGGCGCT 300
 CGAG 304

(2) INFORMATION FOR SEQ ID NO:421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

TAATTTAGAT TATACAGAAC TTGGCCTGCA GAAACTGAAG GAGTCTGGAA AGCAGCACGG 60
 CTTTGCCCTCT TTCTCTGATT ATTATTATAA GTGGTCCTCG GCGGATTCCT GTAACATGAG 120
 TGGATTGATT ACCATCGTGG TACTCCTTGG GATCGCCTTT GTAGTCTATA AGCTGTTCTT 180
 GAGTGACGGG CAGTATTCTC CTCCACCGTA CTCTGAGTAT CCTCCATTTT CCCACCGTTA 240
 CCAGAGACAA CTCGAG 256

(2) INFORMATION FOR SEQ ID NO:422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:

GCGATTGAAA TGGATCCTCC AGCTCTTCCA CCAAAGCCAC CTAAGCCAAT GACTTCAGCA 60
 GTTCCAAATG GAATGAAGGA CAGTTCTGTT TCTCTTCAGG ATGCAGAATG GTACTGGGGG 120
 GATATTTCAA GGGAGGAGGT AAATGACAAA TTGCGGGATA TGCCAGATGG GACCTTCTTG 180
 GTCCGAGATG CCTCAACAAA AATGCAGAGA CTCGAG 216

(2) INFORMATION FOR SEQ ID NO:423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

GAATTCGGCC TTCATGGCCT AAAATTAATG AGTTGAACCT GTGACCACTG CATTCAAGAA 60
 GAGTCACCCA AGAGAGAGGT GGGGAGTCGA ACAGAGCTCC TTTACTTTCT CCCACAGAGG 120
 AAAAGGTGGA ATTCTGGGCT GGCTTTCCCT CACCAGAGGG TATCCCAAAT CTATGACAAA 180
 AGAAAAATGC CAGTCTCTTT TGGAAAGTAG GGAATGCCCT AGTGATGCTG TATGAAGAAG 240
 CAAGCCTCCA TCTTCCCCGG GGAAATTGA AACCAAGATG GGGTCCTGTC AATGACCCTC 300
 TAGCATTTAT TGAGTGCCTA TTAGACAGGT GGCCTTGGGC TTGAAATGC AATATCTTAT 360
 TTAACTTAAT TCTGAGAACG TATCTCGAG 389

(2) INFORMATION FOR SEQ ID NO:424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

```

GCCCCGTGCTG ATGTCTTTGA AAGAAGGCTA TAAGAAGTCC TCAAAAATGG TATTTAAGGC      60
TCCCATCAAA GAAAAGAAGA GTGTTGTGGT CAACGGAATA GATTTATTAG AAAATGTCCC      120
ACCCAGGACA GAGAATGAGC TCCTTCGAAT GTTCTTCGGG CAGCAGGATG AGATTTCGACG      180
GTTGAAAGAG GAGCTGGCCC AGAAGGACAT CCGCATTCCG CAGCTCCAGC TGGAACTGAA      240
AAACTTGCGC AACAGCCCCA AGAACTGTGA GCTCCCCAGC TGGGCTGTTT TCTAAGCCGA      300
TCTCTCCGTC GTTCTACTC ATCCCTTAAC TTCTCCCTTA CCAGTGACCC CAGAGACAGA      360
GCCAGGACAG GAGTGGGGGC CAGCCTGAGG ACCCCCGCCT ACCACCTCGA G      411

```

(2) INFORMATION FOR SEQ ID NO:425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

```

GGTACCAACA GGACACCCCG GTGGCCCCC GCTTTGACGT CAATGCCCCG GACCTCTACA      60
TTCCAGCAAT GGCTTTCATC ACCTACGTTT TGGTGGCTGG TCTTGCGCTG GGGACCCAGG      120
ATAGGTTCTC CCCAGACCTC CTGGGGCTGC AAGCGAGCTC AGCCCTGGCC TGGCTGACCC      180
TGGAGGTGCT GGCCATCCTG CTCAGCCTCT ATCTGGTCAC TGTCAACACC GACCTCACCA      240
CCATCGACCT GGTGGCCTTC TTGGGCTACA AATATGTCGG GATGATTGGC GGGGTCCTCA      300
TGGGCCTGCT CTTGCGGAAG ATTGGCTACT ACCTGGTGCT GGGCTGGTGC TGCGTGGCCA      360
TCTTTGTGTT CATGATCCGG ACGCTGCGGC TGAAGATCTT GGCAGACGCA GCAGCTGAGG      420
GGGTCCCGGT GCGTGGGGCC CGGAACCAGC TGCGCATGTA CCTGACCATG GCGGTGGCGG      480
CGGCGCAGCC TATGCTCATG TACTGGCTCA CCTTCCACCT GGTGCGGTGA GCGCGCCCCG      540
TGAACCTCCC GCTGCTGCTG CTGCTGCTGG GGGCCACTGT GGCCGCGGAA CTNATCTCCT      600
GCCTGCAGGC CCCAAGGTCC ACCCTGTCTG GCCACAGGCA CCGCCTCCAT CCCATGTCCC      660
GCCCAGCCCC GCCCCAACC CAAGGCTCGA G      691

```

(2) INFORMATION FOR SEQ ID NO:426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```

GCAGACCATA TATCGAAAGT TCTTTACTTG TATCAAGGTG AGAAAAAATT AGAAGAGATA      60
TTACCTCTGG GACCAACAA AGCTCTTTT TATAAAGGAA TGGCATCATA TCTTTTACCA      120

```

```

GGACAAAAAT CTCCATGGTT TTTCAAAAA CCCAAAGGTG TAATAACTTT GGACAAACAA 180
GTAATATCCA CGAGTTCAGA CGCCGAATCC AGGGAAGAAG TTCCCATGTG TTCAGATGCT 240
GAATCCAGGC AAGAAGTTC CATGTGTACA GGCCCTGAAT CCAGGCGAGA AGTTCCCGTG 300
TATACAGATT CTGAACTCGA G 321

```

(2) INFORMATION FOR SEQ ID NO:427:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 190 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

```

GAATTCGGCC TTCATGGCCT ATATACTATC AAATGAAAAT AGCAAGATGC TACCATTAT 60
ATTAAAAAGA GGACAAAATA TTAATATATT CATGGTTGCT TGTCTATGTG GAATATTCT 120
GGATATATAC ATAAGAAGTT ACATTGGTTA CCTATGGGCA GGTTACTACT GGGTGGCAGG 180
TGGGCTCGAG 190

```

(2) INFORMATION FOR SEQ ID NO:428:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 670 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

```

GAATTCGGCC TTCATGGCCT AGGCAAAGCT GGCCCTGACG CCTGGGTTTC TTGGCCCCAG 60
CTGCCCAGCA GGTGCCTCGA TTCCCTGCCC TTGTGACCTC CCAGGAAACA GAACTGATCT 120
GGGACACTAT GTCACCTCTC CTCTCATCTG GGGTCAGTCA GGGTTCGGGG GCTGCAGCAG 180
CCAAGCGCAT GAGAGGTGTT TCCTTGGCCT TCCAGAAGGC CCACTGTGGA GCCAGCCTCC 240
CTATGGGAGG CAGAGCGGCA AGGACAGGGC TTTGGAATCA GCCAGGTCGG CTCCTGGGCT 300
GTGGCCGTGG AGAAACACTG CCCCAGGAT GACACAGGCA AGAGCCCCTG AGGCATGGGA 360
GGCCCAGGGA AGACCATGGG CTGTAGGGGA GAGTGTGGCA GGTGACCCAA AGGCCCAAAG 420
AGGGCCGTGG GGCCTGAGGA GGTGATAATC TCTTCTGAGT GGGGGCAGGT CGATTCTTGC 480
ACAAGGTGGG CTCTTCACTG AGCCATAAGG GACAGGGAGG TATGGGAGAG CGCTGGGGGC 540
CCATCCCCCT GTCCACCCAG TGTCCACTGG CCTGTCCTTC AGGGAGCAGA GCAGAGCAGG 600
TGGTGGACGG GCCCAGTGCT GGGTGTTC ACCACCATCC CCCCATCCCC CATCTAAGTC 660
GCTCCTCGAG 670

```

(2) INFORMATION FOR SEQ ID NO:429:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 278 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

```

GTAAGGATTG GCGATTCTTA CAGCGAATGA TCACCGCTCC CTGCATCCTC TTCCTGTTTT    60
ATGGCTGGCC TGGTTTGTTT CTGGAGTCCG CACGGTGGCT GATAGTGAAG CGGCAGATTG    120
AGGAGGCTCA GTCTGTGCTG AGGATCCTGG CTGAGCGAAA CCGGCCCCAT GGCAGATGC     180
TGGGGGAGGA GGCCAGGAG GCCCTGCAGG ACCTGGAGAA TACCTGCCCT CTCCCTGCAA     240
CATCTCCTT TTCCTTGCT TCCCTCCCA ACCTCGAG                                278

```

(2) INFORMATION FOR SEQ ID NO:430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCTGTTTCATC TTAAATGCT    60
GTTTTCTCTG TTCAAAATGC CCTTCTCTAC CTTATCTACT TGTGCCACTG CATATTCCTA    120
AGGCTCAACT CAGGGTATCT TCCCTCGGAA ACCTTGCTCTG ATCATCCTGG CCCCTCTGGC    180
GGACAGTAAT TTCTGCCTCT GTGCTCCCAT CACCTGAGCA CACCTGTATG GTGCTGCTGA    240
GCCCGCTGAA TTGGCATTAT GGGCAGTGC GTCTCCTCCA TTCCATGGAG CTCCTCGAG     299

```

(2) INFORMATION FOR SEQ ID NO:431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

```

GTTACATGAC ACTGTTAATG ATTGCATTG GCTTGCTGTG GGGGCATCTC TTGCGGATCA    60
AACCCACGCA GAGCGTCTTC ATTTCCACGT GTCTGTCCTT GTCAAGCACA CCCCTCGTGT    120
CCAGGTTCTT CATGGGCAGT GCTCGGGGTG ACAAAGAAGG CGACATTGAC TACAGCACCG    180
TGCTCCTCGG CATGCTGGTG ACGCAGGACG TGCAGCTCGG GCTCTTCATG GCCGTCATGC    240
CGACTCTCAT ACAGGCGGGC GCCAGTGCAT CTTCTAGCAT TGTCGTGGAA GTTCTCCGAA    300
TCCTGGTTTT GATTGGTCAG ATTCTTTTTT CACTAGCGGC GGCTCTCGAG                                350

```

(2) INFORMATION FOR SEQ ID NO:432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

```

GAATTCGGCC TTCATGGCCT ACCAGGTTCT TGCTGCCCTG CGACTCCAGT ATCTGCAGGG    60
GGATTATACT CTGCACGCTG CCATCCACCC TCTCGAAGAG GTTTATTCCC TGCAGAGACT    120
CAAGGCCCGC ATCAGCCAGT CAACCAAAC CTTCACCCCT TGTGAACGGC TGGAGAAGAG    180
GCGGACGAGC TTCCTAGAGG GGACCCTGAG GCGGAGCTTC CGGACAGGAT CCGTGGTCCG    240

```


GCAGAAGGTC GAGGAGGAGC AGATGCTGGA CATGTGGATT AAGGAAGAAG TCTCCTCTGC 300
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

GAATTCGGCC TCATGGCCTA CTCCTCAGCC CCTCATCTTG CCTCCACCCA GCTGCTCCAT 60
TTTTGCCACA TCGTGGCCCG CAGCCCCAGA GTCACTGTCC ATGTCACCAT CCTCCTCCTC 120
CTTTGGAATC CTCTCGCAC ACTGTGGCCC TTGTCTCAGG GCCACAAGC TGAAGTGTGG 180
CATAGCTCTC TCTTCTTCTC CAAGAAGACT CAGCAGCCTA CATTCCCATT CCTGGTATGT 240
GCCATTGGGT TGGATGTCCC CACTTATCTC GAG 273

(2) INFORMATION FOR SEQ ID NO:434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

CGAGTGAGCG GCGGGGACAG TGCTTGTGAA ACTGAACACA ACAAAGTAT GGATATGGGA 60
AACCAACATC CTTCTATTAG TAGGCTTCAG GAAATCCAAA AGGAAGTAAA AAGTGTAGAA 120
CAGCAAGTTA TCGGCTTCAG TGGTCTGTCA GATGACAAGA ATTACAAGAA ACTGGAGAGG 180
ATTCTAACAA AACAGCTTTT TGAAATAGAC TCTGTAGATA CTGAAGGAAA AGGAGATATT 240
CAGCAAGCTA GGAAGCGGGC AGCACAGGAG ACAGAACGTC TTCTCAAAGA GTTGGAGCAG 300
AATGCAAACT ACCCACACCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

GAATTCGGCC TTCATGGCCT AAATGATCAA ATTTGGCTT ACATATTTTG CAACAGTGGT 60
ATAACACAAA GAAGTAAGCA AATATGGCAG AAGTGTGGTG GCTTTGGCGT CTACTTTTGA 120
CCATAGTGGT GGCCCTGTTA TTCGTGGCTC CCGGGGTTC TACACATCCT TCCCGATGGA 180
AGAAGGGGTT GGCCAAAAG GTCAGCCAGC TGATGGGTTG GACCAAGAAA GACAGAGTGA 240
TAAGAATGAG TGACACCATG TTCTATCATT TTGTATTAGA TGCACCAAAA AACTATTCTG 300
TTATTGTGAT GCTTACTGCT GCTCTCCAGC CGTTCAGTTC ATGTGTCATG TGCAAAGGTG 360
CTGCTGAAGA ATTTAGATC TTGGCAAATT CCTATCAACG CCCTGGTGCA TTCACCACAA 420

AGGTATTTT TGCAATGGTG GATTATGATG AAAGCCCTGA GGTCTTTGAA GCGCTCCAGG 480
 TAACGTCAGT TCCGAGTTTC TTCCACTTTT CTGCCCAATG GAAATTTACA ACAGATGACA 540
 GTCTCGAG 548

(2) INFORMATION FOR SEQ ID NO:436:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 308 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

GAATTCGGCC TTCATGGCCT AAAATGAAAT TCAGACAAAA TCACTGGCAC CAAAAATGGT 60
 TTATTCGAG CTGCTTCAC TTGACTATT TGGGGGGCTT CTCTCAAGTA CAGATGTGGG 120
 TTGGGGTCCC CTGGAGCAGG CAGGATTGGC AGTAAGAGAT ATTGGCCACT CAAGTCTACT 180
 GTGTGTGTGT GCCTCTGGAA GAGTGAAGAA TGGACTTCAA AAGTAACATC AAAAAATCTAA 240
 CTGCCACCAT CCTGGAGACA TTTTCAGGG CTTTCCTTC AAGTCTTCA AGTACAGGAC 300
 ATCTCGAG 308

(2) INFORMATION FOR SEQ ID NO:437:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 420 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

GAACAGAAGA GATCCCTCG GCCCCACGC CATATGACCA AAGTCACACC AGGTCAGAG 60
 CTGCCCCTC CCAATGGAAC CACCTTATCA TCTAACCTCA CTGGTGGCAT GCCCTTCATT 120
 GATGTGCCCA CTCCCATCTC CTCTGCAAGT TCAGAAGCTG CCTCAGCAGT GGTCACTCCC 180
 TCTACAGACA GTGGCCTGGA ATTCTCCTCC CAAACCACTT CCAAGGAAGA CCTTACTGAT 240
 CTAGAGCAAC CTGGCTCTCC AGGGTACAGC ACAGCTACAG AGCCTGGAAG CAGTGAGCTA 300
 GGTGTTCCCG AGCAGCCTGA CCTCCAGGAA GGGACCCATG TGGAAAAGTC CCAGTCAGCA 360
 TCTGTGGAGT CCATCCCTGA AGTGTTAGAG GAGTGACGT CCCCTGCCGA CCAACTCGAG 420

(2) INFORMATION FOR SEQ ID NO:438:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 279 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCT TCTCACTGCA CCTGGATGGC 60
 AACGTGCTGG ACCACTTCTC GGAGCTGCGC AGCGTCGAGG GGCTGCAGGA GGGCTCTGTG 120
 CTGCGTGTGG TGGAAGAGCC GTACACGGTG CGTGAGGCCG GCATCCACGT GCGCCATGTC 180
 CGAGACCTGC TCAAGAGCCT GGACCCATCC GATGCCTTCA ACGGGTTGA CTGCAACTCC 240

TTGTCCTTCC TGAGTGTCTT CACCGACGGC GACCTCGAG

279

(2) INFORMATION FOR SEQ ID NO:439:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCA CCCAGCCTTC TTCTTTTCAT      60
TATAACCTTT ATACCACAGT AAGCTGTTGC ATCATTCAAA TGACTCTGCA TCCTATATTG      120
AATATTCTCC ATTATTCTCT AATATCTTTG GGGGTACCCA GGATTACAGG GTTCTGGGCA      180
TACATGTAA TGCTTTTGCC AGGACTTTTC TTTTATTCA TTGTCGTGAC CCATTGTCTT      240
TGCTTATATT TAAAGTTTTT GCTCTTGATA TCATTGGTTC TTTCTAAGT CACTTTTTCT      300
GGTAACTGCT TTGGAATGAA TCATACATAT CTCATTACG GAGCTCTCGA G              351

```

(2) INFORMATION FOR SEQ ID NO:440:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

```

GAATTCGGCC TTCATGGCCT ACCAATACTC ATAATTAAAA GTTTTTCGTT GTCAAAACAT      60
TTTCACAGTT CAGGAATCAC AGTCCTATTT CATCTTTTGA AATAAAAGTT AAAGTCCATT      120
TTTCTTAAGC CTTATTATAC CATTATCCAA AAACACTACC TAGCATTATC CTTAGTTTTT      180
CATATCTCCT TAGCAGATAG TTTAGTATAT TCCATTGTGC TTATTTGAGG TTTAAAAAAA      240
GTTGTGGAAG AAGTTTCTCA GGAGTTCAGC AAGCCTTTCC ATCTATCTTC TATTTTAAAA      300
GAATGTGATT TATTGTTTTT ATGAATAAAA TATACCTCGT GTGTTTCTCA TATGATGTTT      360
CATTACATTA ATCATCCATT AAGTAAATGT TTTGTGCTG CAAAACTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:441:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

```

GAATTCGGCC TTCATGCCTA GCCAGGAGGA GGAGGACCCT ATGAACAAAC TCAAGGGCCA      60
GAAGATCGTG TCCTGCCGCA TCTGCAAGGG CGACCACTGG ACCACCCGCT GCCCTTACAA      120
GGATACGCTG GGGCCCATGC AGAAGGAGCT GGCCGAGCAG CTGGGCCTGT CTACTGGCGA      180
GAAGGAGAAG CTGCCGGGAG AGCTAGAGCC GGTGCAGGCC ACGCAGAACA AGACAGGGAA      240
GTATGTGCCG CCGAGCCTGC GCGACGGGGC CAGCCGCCGC GGGGAACTCG AG              292

```

(2) INFORMATION FOR SEQ ID NO:442:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 222 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

```
GAATTCGGCC TTCATGGCCT ACCGCCTCGC TGCCTGGACA CCTGTCCGTG CCACCCTGGT    60
CACTGAGCAG GACATCCGCG TCTGTGGCCC CTGGGACCCT GCCCCCGACA GCCAGGCCTG    120
GGTTTGTCTT TTTAGGTAGA GTGCCTGGTC CAGGTCATTG GAGGAGAGTC CACATGGCCA    180
CCTCTGGCGT GTTCTAGAGA GGCCCTCCCG TCTAGGCTCG AG                        222
```

(2) INFORMATION FOR SEQ ID NO:443:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

```
CTTTATGACA GCCATGAGCT TTTCCGGTG CATTGCAATT GTTTTCCAG TCCAGAACAT    60
TAATTTGGTT ACACAGAAAA AAGCCAGGTT TGTGTGTGTA GGTATTTGGA TTTTGTGAT    120
TTTGACCACT TCTCCATTTC TAATGGCCAA ACCACAAAAA GATGAGAAAA ATAATACCAA    180
GTGCTTTGAG CCCCCACTAC TCGAG                                         205
```

(2) INFORMATION FOR SEQ ID NO:444:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 178 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

```
GAATTCGGCC TTCATGGCCT ACCTGCCTCC CTCCTTGCTT CTTGCTCTGC TAACTCAACT    60
CTGCCTTCCT CTTTTCATT CTTCTACTCT GCCCTATATG GAGGACAAAT GGACACCAGG    120
GGTGCTAACC TTATTGGTGC CTGCCCCAGC CTACCCAGG TGCAAGCAGA CTCTCGAG      178
```

(2) INFORMATION FOR SEQ ID NO:445:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 251 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

```

GAATTCGGCC TTCATGGCCT AGAAAGCCAC AAAC TTTT TTA ACT TCAAAGGCTT      60
CTTTCTCTTT AAAAAAATT ATTTTAAATA TAGAGTCAAA AAATTGGATG TATTATTTTG      120
AGCTTCTAAT TGCTGCCACT TGGAGATGTC CAAGTAAGAA GGCTTCTTT TTACATGGGA      180
TGAATTGTGC ACTTCTACTG ATGATGACTA CAGCAGAAGT GATGTTATAC GTACAGGCAC      240
TTGAACTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

```

GAATTCGGCC TTCATGGCCT AGGGCTTATA TTTTAACTGA ACTATTATTA AATAAAAACA      60
AAATAAAATC TTATCATATA GGTGTAATCT GTTCTAAGGA AAAAAATCCTT CTATCAAGAC      120
TAAACGTCTA ACTGAATACA GAATGACATT TCATGCCTTA AGGTCTCTGT CCATGTTGTT      180
CCTTCTTTCT ACTGTCCTTT ACTGTATTAG TTCAAACAT TCTAATTCAC TCTCCAAAAC      240
CCAATTCAA CATCACCATC AGAAAGTCTT CCATGATGGG CCAGGTGTGG CGGCCCTCGA      300
G                                     301

```

(2) INFORMATION FOR SEQ ID NO:447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 150 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

```

GAATTCGGCC TTCATGGCCT AGCTGAAATG CTTTCTATTG GATACTATCT GGGCATATTA      60
CTTCCTGTGG TTCACTGTCT GGGTGACAGG ATTCATAGAA GCCCAAATC TAGCACCACG      120
CAGCATACCC TTGTAACAAA GCCACTCGAG                                     150

```

(2) INFORMATION FOR SEQ ID NO:448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

```

GAATTCGGCC TTCATGGCCT AATTGATTT TATTAGGTTT AAATTGTATT TCTTCAAATT      60
TCATAAACTA TAGCATTTAT CTCCATATTT TTAATAAATG ATCACAAATA AATCACTGTT      120
AATATCTCCA TTTACACTTT TACAACTCCT GCTATTGCTG GATTTTTCAT CCTATGATAT      180

```

GTAAACCAA TTAAAATAC ATTTAAAGAA TCACAGCTGT CTCGAG

226

(2) INFORMATION FOR SEQ ID NO:449:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 453 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

GAATTCGGCC	TTCATGGCCT	AAGACTGGGG	GCATGTACCC	CACCTACTTT	CTGCACCTGG	60
ACCGTGAGGA	TGGGAAGAAG	GTAAGGTTGG	TCTGGGCATG	TTATCATCTA	GGCTTTACAG	120
CCCTTTGAAA	TCCTAGGGGC	TGAAATGTGA	CTGGAAGTCT	CATATCTACC	GCTGACCTCT	180
CAGTTCCTCA	AAGAACTGC	CTTCGTGTCT	GGTCTGTGCA	CATCTTTGTG	TTTCCAGTG	240
CATTTGTGTG	TGTGCACATA	TGTGCGTTTG	GGAGCTGACG	CAACGGAGAG	AGTCTGTGTG	300
AGTGGCTCTC	ATGACTGTGT	GCAGACCAGA	GGCTGAGTCT	GGAATATGAC	CTCATTCCAC	360
TCCCCAAGGT	GTTCCTCCTG	GCGGGAAGGA	AGAGAAAGAA	GAGTAAAACT	TCCAATTACC	420
TCATCTCTGT	GGACCCACA	GACTTGTCCTC	GAG			453

(2) INFORMATION FOR SEQ ID NO:450:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 246 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

GAATTCGGCC	TTCATGGCCT	AAAAGCAAAT	TAACCTGTTC	TGAAAAGAAA	GTATAGATTA	60
ATTTTGTTTT	CTGTTTAAAT	TTTATCTCCT	TGGTAAAGAT	TTTTTTTTCC	TGGGCAGAAA	120
ACTTGGCATT	TTTAGGCGTA	GATACCTTAC	CTTACAATGC	CAAAATGAAT	TTAATTCCAG	180
TACTCAGGTT	TTTCCCTTTA	ACAGACTCTA	TGTGTACCAG	GCATTGAATT	CTAGACCTGC	240
CTCGAG						246

(2) INFORMATION FOR SEQ ID NO:451:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 414 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

GAATTCGGCC	TTCATGGCCT	AGTTTGGTGG	GGTTGAAGTT	GATGGCAAAC	TCATGGGAGA	60
CCTTCCAGTC	TGGGGGTAAC	TGGGCCCCGA	ATCCCAGAGC	TGGAACATC	TTATCACTGT	120
CGTAGTCCTG	AATGATCTGC	CCAACAGCCC	AGATGGCCGA	CAGATATTCT	TTGGTGCCCA	180
TAGGGTTGAT	ATAGTGCAAA	GAGGAAGGGT	CGAGGGGATT	CCCGTTGGAG	GCTGTAAAGT	240
CTATTCCAAC	GGTGAACATG	AGCTGGCAGC	CTCCCAGGAT	GTAGTCAAGG	AAGGAGTAGT	300
CTCGGTTTAT	CTTGCCAGAT	CGCAGGATGA	TGATGCCCCA	GTTTTTATAG	TTCTTCTTCT	360

TCCTCTGCTT CTTGGGGTTG ATGCACTCGA ACTCCAGCGG GACGCTGTCT CGAG

414

(2) INFORMATION FOR SEQ ID NO:452:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 374 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

GAATTCGGCC	TTCATGGCCT	ACACACTGAC	TGACAGACCA	CGGTATGCCT	TGCACCACCC	60
TGGCTGCTGG	GGTCCAAAGA	GGGATCTGGT	AGACCTGGGC	TGGAATCTCA	GCTTCACCAT	120
TTACCATCTG	GGTGGCCAAT	GGAGTGTTAC	TTGGCCTCTC	TGAGCCTCGG	TTTGTCTCGT	180
CTCTGAAACA	GTAAGATACC	TCCCTTTGGC	TGTTGTGATG	AGGATGAAGG	TTAGCCTATG	240
CCCAGTAGTA	TGCCTGTCCC	TTCATCGATG	CCTGCTCATC	TCACTCTTGC	TCTGGAAACA	300
CCCCTAGTAG	AGGCGCAGAG	GGGCAGGGCC	CACCCACCC	ACCAAACGT	GGTGCAGAAT	360
GAGGTGATCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:453:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 288 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

GGGTCCGTCC	GCCGCCACCA	CCCACTCCGG	ACACAGAACA	TCCAGTCATG	GATAAAATG	60
AGCTGGTTCA	GAAGGCCAAA	CTGGCCGAGC	AGGCTGAGCG	ATATGATGAC	ATGGCAGCCT	120
GCATGAAGTC	TGTAAGTCTG	CAAGGAGCTG	AATTATCCAA	TGAGGAGAGG	AATCTTCTCT	180
CAGTTGCTTA	TAAAAATGTT	GTAGGAGCCC	GTAGGTCATC	TTGGAGGGTC	GTCTCAAGTA	240
TTGAACAAA	GACGGAAGGT	GCTGAGAAAA	AACAGCAGAT	GGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:454:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

GAATTCGGCC	TTCATGGCCT	AAGAAGTGTC	TCCTGTATCC	ACCTCTTCCT	GGCCTCCCTT	60
CCCCCACTTC	CTGGTCCCTG	TCCAATCCTC	AGGTTGGTGC	TCTCACTTCT	TGAAAGCTCT	120
AGGCACCCCC	GCCTCCCGCC	AGGCTCCCCG	TTGGCTCCTG	GCAGGCCAGC	TGAGAATGAA	180
CAGGAGATGG	AGGCAGGCAG	CCCAGGCTGC	AGAGGTGAGG	GATGTGGGGC	CAGGCCCAGA	240
GGGCTCAGCC	TAGAGGCTTC	CAATCTCAGA	TTCTCCTGCC	TGTGGTCATC	TGTTTGTCCA	300
TCACCCAGG	ACAGGGCAGA	CAGAGGGGCA	AAGCACTGGG	GGCCCCAGAG	CCTAGCTTCC	360
CCTCAGCCTG	GGGGAACTC	GAG				383

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

```

AGAGCACGTC AATGCCATGA GGGGCTGCA AAGCAGCAAG GAGCTCAAGG CTGAGCTGGA      60
CGGGGAGAAG GGCCGGGACT CAGGGGAGGA GGCCCATGAC TATGAGGTGG ACATCAATGG      120
TTTAGAGATC CTTGAATGCA AATACAGGGT GGCAGTAACT GAGGTGATTG ATCTGAAAGC      180
TGAAATTAAG GCCTTAAAGG AGAAATATAA TAAATCTGTA GAAAACTACA CTGATGAGAA      240
GGCCAAGTAT GAGAGTAAAA TCCAGATGTA TGATGAGCAG GTGACAAGCC TTGAGAAGAC      300
CACCAAGGAG AGTGGTGAGA AGATGGCCCA CATGGAGAAG GAGTTGCAAA AGATGACCAG      360
CATAGCCAAC GAAATCACA GTACCCTTAA TACGGCCAG AATCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

```

GAATTCGGCC TTCATGGCCT AAATTCATG AAAACAAAT GGCTTAAACC CAGGGAAGCA      60
AGGATTATAA TTGATTTTTT TGAGCAATGT CTCTTTTGGT TACAAAGTAA AAGGTAAAAT      120
AAAAGTTTAA AAGCATTTGG AAAGAATGTT CTTTGGTTTT TTCACTCAGT AACCTAAAGT      180
TTAATGACCC TTTACAGTGC TGATAAACAC TTAAATTTTT GCAGTAGGCA TTGCTAGTTC      240
AAATGAAGG AAGGTTGCCA GGCTCATGCC TATAGTCCCA ACTACTTAGG AGGCTAAGGC      300
AGGGGGACGC CCTCGAG      317

```

(2) INFORMATION FOR SEQ ID NO:457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

```

GAATTCGGCT TCATGGCCTA CTGCTCTTTG GCTAAGGTGG CAGTGTACCT CTAGATCAAC      60
CTGGGCAACA GTCACAAGGG AGTGTGACTT CTTGGCCATA ATAACTCAC TTGATAGTGT      120
TTATGTTATT AATCTGAATG CAACAGAAGA CAAAAGCACA GGCATGCACA CACACAGAAC      180
CCCAAACCAC TAAAACTAC CTAAACACTG ACTTAGTAAA TAGTAAAAAG GTAATGTTGG      240
GACTTTTAAA CCTTGAATCC ATTAGCCAGG CTTGGGATGA AAGGACCATC TAAATCATG      300
CTAGTCTAAA CCATGCTCTT CCACACAGCT GTTTAAAAAC CACTGGGTAT GAGGAATATG      360
CTAGAAAGAA ATGTTAAAAA TAGATTGTTG GCTCACACTT ATTTTCTAA TAAATAGGAC      420
CATTATTACT ACCAGGAAAG TCTTATTTAT TTTGCCTGAA ATTGGCTTAA AGAAAGTCTC      480

```


ATGACGGGAT GGGATGGGCC GGCACCTCGAG

510

(2) INFORMATION FOR SEQ ID NO:458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

```

GAATTCGGCC TTCATGGCCT AGCGGAAACA ACTGAAACTA ATGGAAGATA TGGATACAGT      60
AATTAAACCC CGTCCTCAAG TAGTAAACA AAAAAACAG CGACCAAAT CTATTCACAG      120
AGATCATATT GAATCCCCCA AAACACCAAT AAAGGGTCCT CCAGTCTCTA GCCTTTCTTT      180
GGCATCGCTG AACACGGGTG ATAACGAGAG TGTACATTCA GGCAAGAGGA CGCCAAGATC      240
AGAGTCTGTA GAAGGCTTCT TATCTCCAAG TCGTTGTGGC AGTCGAAATG GAGAAAAAGA      300
CTGGGAGAAT GCATCAACAA CTTCTTCAGT GGCTTCTGGA ACAGAATATA CAGGACCAAA      360
GCTCTACAAA GAAACACCTG AG                                     382

```

(2) INFORMATION FOR SEQ ID NO:459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

```

GAATTCGGCC TTCATGGCCT ACTGAGTCCC AGGCCGGGGC CCTGCCCCAG CCAGGGCTGG      60
GACTCTGCAG TTGGGAGCTT GTCCAGCTGC CCCCTCTAAT GCTTTTCTCC TCCAGGACAC      120
AGGGAGCCTC CGGAAGCACA GTAGTCCCCG TGTGTACCT TAGGCTGACC TCTGTCCCCA      180
GGGGTGACGT AATGCTGTCA CTGTCTTGAA TTCTTCATCG TTAAACAGGG AGCCCACTGT      240
TTTACCAAAA AGCAGAATTG GATTTTTTTT TTAAGTCGAT AAATTTTAC TCAAGGAATT      300
CCATGTTGTG ATTTCTTCCA CTGTCCATCA AGGTCACCTT AGATCCTCTA AAGAGCTAGA      360
GTCAAAAGAT TTATCTTCAA GTTAGTCCTT TTAATGAAA CCGATGCTTA TTTTAATCCA      420
GTCAGCCCTC GAG                                     433

```

(2) INFORMATION FOR SEQ ID NO:460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

```

GTCCGGCTAA AGTAATCCAG TCACCTGCTG CTGATACTAG AAGGGCTGAG ATGTCACAAA      60
CAAATTTTAC CCCTGACACT CTTGCCAGA ATGAAGGGAA GGCTATGTCT TATCAGTGTA      120
GCCTTTGTAA GTTTCTATCA TCATCCTTTT CCGTGTTAAA AGATCATATT AAGCAACATG      180
GTCAGCAAAA TGAAGTGATA CTGATGTGCT CAGAGTGCCA TATTACATCT AGAAGCCAGG      240

```

AGGAACTTGA AGCCACGTG GTGAATGACC ATGACAATGA TGCCAATATC CACACCGAAC 300
TCGAG 305

(2) INFORMATION FOR SEQ ID NO:461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 563 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT AAGAAATATC AGTCCAAGCA AGAGGAATTA CAGAAAGATA 60
TGCAAGGAAG TGCACAGGCA TTGGCTGAAG TAGTGAAAAA CACAGAGAAC TTCTTAAAG 120
AGAATGGTGA AAAGCTGTCA CAGGAAGATA AGGCTTTGAT TGAACAGAAA CTTAATGAAG 180
CTAAGATAAA GTGTGAACAG CTTAATTTAA AAGCAGAACA GTCTAAAAAG GAGCTGGATA 240
AAGTTGTGAC AACAGCAATC AAGGAAGAAA CTGAAAAGGT AGCAGCAGTG AAGCAGCTGG 300
AAGAGAGCAA AACCAAAATA GAAAACCTTT TGGACTGGTT GTCAAATGTT GACAAAGACT 360
CAGAAAGGGC AGGGACAAAA CACAAACAGG TAATCGAACA GAACGGGACC CATTTCAG 420
AAGGTGATGG CAAGTCAGCA ATTGGAGAAG AGGATGAAGT TAATGGTAAC CTGTTGGAGA 480
CTGATGTTGA TGGGCAAGTT GGAACCACTC AGGAGAATCT GAATCAGCAA TATCAGAAAG 540
TTAAGGCCCA ACATGGACTC GAG 563

(2) INFORMATION FOR SEQ ID NO:462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GCGGCTGTGA AGATGGCGGC GGCTGCGTGG CTTCAGGTGT TGCCTGTCAT TCTTCTGCTT 60
CTGGGAGCTC ACCCGTCACC ACTGTCGTTT TTCAGTGCGG GACCGGCAAC CGTAGCTGCT 120
GCCGACCGGT CCAATGGCA CATTCCGATA CCGTCGGGA AAAATTATTT TAGTTTTGGA 180
AAGATCCTCT TCAGAAATAC CACTATCTTC CTGAAGTTTG ATGGAGAACC TTGTGACCTG 240
TCTTTGAATA TAACCTGGTA TCTGAAAAGC GCTGATTGTT ACAATGAAAT CTATAACTTC 300
AAGGCAGAAG AAGTAGAGTT GTATTTGGAA AAACCTTAAGG AAAAAAGAGG CTTGTCTGGG 360
AAATATCAAA CATCATCAA ATTGTTCCAG AACTGCAGTG AACTCTTTAA AACACAGACC 420
TTTTCTGGAG ATTTTATGCA TCGACTGCCT CTTTtaggag AAAACAGGA GCTCGAG 477

(2) INFORMATION FOR SEQ ID NO:463:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

```

GTTGCACTCC TGTGTACTC TTTTAGAGGT GGAAAAGAGG TGGATACTGA GATCTAAGAG      60
GAAAGGATAG TCATTCACGT TCTGAGATAT GCGCTCTCTC TATTGTTCTC GAACACAAAG      120
GGATAGTCTC TTTTCTGGAG CTGATGTCCC TGCTTGGAGG TTAGCCCCAA AACATGGCTC      180
TTGTATTGTT CTAAGAGAAA AGGCTTTCAT TTGGTTCTT CTGATTGGTG TTACCTACTG      240
CCTAATATGT GTTCATTTT TGACAGAGAG GCAGACTATT GAAAAAGTCT GTGTGAACAG      300
AGAGCAGTTC ATTAAGCCCA TTGCTTTCAG TAATGTGGCC TTGACCCCTT CTGCTTCCCC      360
CTTCTCCCAT GACGAGCTCG AG                                          382

```

(2) INFORMATION FOR SEQ ID NO:464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

```

GGACCTGCCT CAAGGACATG GGTGGACATA TGGGCGGACT CTCAGGGACA ACCAAAGTGA      60
TGATCACACT GACCGATGTC AATGACAACC CACCAAAGTT TCCGCAGAGC GTATACCAGA      120
TGTCTGTGTC AGAAGCAGCC GTCCTGGGG AGGAAGTAGG AAGAGTGAAA GCTAAAGATC      180
CAGACATTGG AGAAAATGGC TTAGTCACAT ACAATATTGT TGATGGAGAT GGTATGGAAT      240
CATTGAAAT CACAACGGAC TCTAAACAC TCGAG                                          275

```

(2) INFORMATION FOR SEQ ID NO:465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

```

GTTCTAGACC TACCCCGAAC AGCCCCAAC AGTCAGAGTG GCACAAAATG ACAGTCTCCA      60
AAACTGCCC CGACCAAGAT CTCAAAATCA AACTTGCTGT CCGAATGGAT AAGCCTCAAA      120
ACATGAAGCA TTCTGGGTAT TTATGGGCCA TCGGTAAGAA TGTCTGGAAG AGATGGAAGA      180
AAAGGTTTTT TGTATTGGTG CAGGTCAGTC AGTACACGTT TGCCATGTGC AGTTATCGGG      240
AGAAGAAAGC GGAGCCTCAG GAACCTTCTAC AATTGGATGG GTACACTGTG GATTACACCG      300
ACCCCCAGCC AGGTTTGGAG GGTGGCCGAG CCTTCTTCAA TGCTGTCAAG GAGGGAGACA      360
CCGTGATATT TGCCAGTGAC GATGAACAAG ACCGCATCCT GTGGGTCCAG GCCATGTATC      420
GGGCCACGGG GCAGTCACAC AAGCCTGTGC CCCCACCCTA AGTCCAGAAA CTCAACGCCA      480
TCCTCGAG                                          488

```

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```

GAATTCGGCC TTCATGGCCT AGCCGCTGCG GTGAGCCTTG AAGCCTAGGG CGCGGGCCCG      60
GGTGGAGCCG CCGCAGGTGC AGATCTTGGT GGTAGTAGCA AATATTCAAA CGAGAACTTT      120
GAAGGCCGTC TGAGCTAAAA AATAATGCTG ATTTGGCCTC ATCATATTTA TGAAGGAGGG      180
AGAAATAGAA GCATGTATAA TGTAAGAAAA CATATCTTAT CCTTATGTTT GCATATATTG      240
TTGAATAAAT ATAGTTTAAT GAATATGTTT TCTCACCTTT CTTTGCTTGC ACTTCTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:467:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 381 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```

GTTCTAGACC TGCCTCGAGA TATGCCGAA GGTGTCATGG CTGGTCCCAG GGCCAGCACA      60
GGCCCCAGGC CGGCTGCCT GGTTTTATTT TTATTAACT TTATTTCTG TTTTATGAGT      120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC      180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG      240
CAGAGGGCGG ACCGGGTGGG CAGGGGCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT      300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCTTTT TAAACAAAA TGCCCTCGTT      360
TGTAACCCCT TAACGCTCGA G                                     381

```

(2) INFORMATION FOR SEQ ID NO:468:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 304 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

```

GCTGTCCAAT TATACTGACC TGGCCATGAG CACGGTGAAG CAGACCCAAG CCATTCCATA      60
TACTGGTCCC TTAAATTGCT TCTGTTACCA GCTGCAGAAA TTGACAGGTG ATGTGGAAGA      120
ATTAGAAATT CAAGAAAAAC CTGCTCTGAA AGTGTTCAAA AATATTACTG TAATACAAGA      180
ACCAGGCATG GTGGTATTAG AATGGCTGGC AAACCTTCT AATGATATGT ATGCAGATAC      240
AGTAACAAC TGTATATTGG AAGTTCAGTC AAATCCCAA ATAAGAAAAG GCGCAGAACT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:469:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

```

GCGATTGAAT TCTAGACCAC CCCGCACTCC AGCCTGGGCA ACAGAGCAAG ACTCTTTCTT      60
AAAAAATTA AAAAAAAG GAGTACCCAT TGGATAAAC CTCTTTGGAG GAGAGGACAT      120

```

```

AGTACAGAGG TTATACTGCA ACATGGACCC ACCAATAGCC ATGGATAACT TAGTTGGGAT      180
TACCCCTGCC TGCTGTTTAG ATACTTACAT GGACACTAAT TTCTGCCCAT CAACCTCCCT      240
CTCTTTCTCC TTCAATGCCC ATCAACCTCC CCTCTTTCT CCATCAATGC TATGTTGGTT      300
TTTTTTATTT GCCATCTGG CAGGTTTAGG GCAGAGCATG CTCGAG                        346

```

(2) INFORMATION FOR SEQ ID NO:470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

```

GAATTCGGCC TTCATGGCCT AGGATTTTCA GCAAGAATTA AATTATTCTG CATATTGGAC      60
AGGGCCTATT TAGAGGCCTG CACATCTGTT TTTATCCATT TGTGTAACGA TACCGTGTGT      120
GAAAGTAGGT TCATGGATCA GATGAGAAAA GTCAATTCTC TAAGATACCT TCCCTTGTGG      180
CTGTGGATTG TCACCTTGAT GATTCAGCTT TGTGTGATGG AGGTGTCTGC CAGAGAATTC      240
CTGGCCACCC AGCTCCTCAG CCTCTGCCC CCACCCCAA TACACACACC TTTCTCCATT      300
GTACCAGATG CTGGTCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

```

GAATTCGGCT TCATGGCCTA CTTTCATTCAC TGTAACCA ATAGCAAACA ACGGAAGAGA      60
CGGGCAGAGT TGAAGCAACA AAGAGAGGAG GAGGCAACAT GGCAAGAGCA GGAAGCCCCT      120
CGGAGAGACA CTCCCACCGA AAGTTCTTGC GCAGTGGCCG CCATTGGCAC CCTGGAAGGC      180
AGCCCCCAG GTATCTCCAC CTCCTTCTT AGGAAGGTGC TGGGCTGGCC CTCAGGCTG      240
CCGAGGGACC TGTGTAACG GATGCAGGGA CTCCTGCAAG CTGCTGGCCT CCATATCAGG      300
GACAATGCTT ACAACTACTG CTACATGTAC GAGCTCCTGA GCCTGGGGCT GCCACTCCTC      360
TGGGCGTTCT CTGAGGTCCT GGCAGCCATG TACAGGGAAT CTGAGGGCTC CCTCGAG      417

```

(2) INFORMATION FOR SEQ ID NO:472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

```

GAATTCGGCC TTCATGGCCT ACAAGAGGCA GCTTATAGAC AACCAGCAAGC TCATTGAGAC      60
GCAAATGGAA CGGTTCAAAG TTGTGGAACG AGAGACCAAA ACCAAAGCTT ACAGCAAAGA      120
GGGCTGGGC CTGGCCCAAG AGGTAGATCC TGCCCAAGAG GAGAAGGAAG AGGTTGGCCA      180

```

GTGGCTCAG AATACCATCG ACACGCTCAA CATGCAGGTG GACCAGTTTG AGAGTGAAGT 240
 GGAGTCACTG TCAGTGCAGA CACGCAAGAA GAAGGGCGAC AAGGATCAGA AGCAGGACCG 300
 GATTGAGGGC TTGAAGCAGC AGCATCTCGA G 331

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

GAATTCGGCC TTCATGGCCT AGAGGTGCTT CAGTGGTACA ATCAGTTAGC ACACAGTACG 60
 TATACAGCAG TATGTGTGTG AGAAATTATT TTAAATATAA GAATTATCAA AAATTATAAG 120
 AAGACCATCC CTTTAACTGA ATAGTTTCAC CAAAAATCAG AAAAAATATGT AAGTGATACA 180
 TTTTGTTCCT TGGATATAGC AATGTACCAC CTTGCATAAA TGAGACTATT AAAATGATCA 240
 CCTGAGGTCA GAAGTTCGAG 260

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

GAATTCGGCC TTCATGGCCT ACAAGATTT GAGGAAAAGA GGTCAAATT GGACCACTCA 60
 GTGAGTAGCA CCAATGGCCA CAGGTGGCAG ATATTTCAAG ATTGGTTGGG AACTGACCAA 120
 GATAACCTTG ATTTGGCCAA TGTCAATCTT ATGTTGGAGT TACTAGTGCA GAAGAAGAAA 180
 CAACTGGAAG CAGAATCACA TGCAGCCCAA CTACAGATTC TTATGGAATT CCTCAAGGTT 240
 GCAAGAAGAA ATAAGAGAGA GCAACTGGAA CAGATCCAGA AGGAGCTAAG TGTTTGGAA 300
 GAGGATATTA AGAGAGTGGA AGAAATGACT GGCTTATACT CTCCTGTCAG TGAGGATAGC 360
 ACAGTGCCTC AATTGGAAGC TCCTTCTCCA TCACACAGTA GTATTATTGA TTCCACAGAA 420
 TACAGCCAAC CTCCAGGTTT CAGTGGCAGT TCTCAGACAA AGAAACAGCC TTGGTATAAT 480
 AGCAGGTTAG CATCAAGACT GAAAACCTGA G 511

(2) INFORMATION FOR SEQ ID NO:475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

GAATTCGGCC TTCATGGCCT AGTCACAGCT GTCTATTTT GTCACTGTCG GAACATTGTT 60
 CATCGTGATT TAAAAGCTGA AAATTTACTT CTGGATGCCA ATCTGAATAT CAAAATAGCA 120
 GATTTTGGTT TCAGTAACCT CTTCACTCCT GGCAGCTGC TGAAGACCTG GTGTGGCAGC 180

CCTCCCTATG	CTGCACCTGA	ACTCTTTGAA	GGAAAAGAAT	ATGATGGGCC	CAAAGTGGAC	240
ATCTGGAGCC	TTGGAGTTGT	CCTCTACGTG	CTTGTGTGCG	GTGCCCTGCC	ATTTGATGGA	300
AGCACACTGC	AGAATCTGCG	GGCCCGCGTG	CTGAGTGGAA	AGTTCCGCAT	CCCATTTTTT	360
ATGTCCACAG	AATGTGAGCA	TTTGATCCGC	CATATGTTGG	TGTTAGATCC	CAATAAGCGC	420
CTCTCCATGG	AGCAGATCTG	CAAGCACAAG	TGGATGAAGC	TAGGGGACGC	CGATCCCAAC	480
TTTGACAGGT	TAATAGCTGA	ATGCCAACA	CTAAAGGAAG	AAAGACAGGT	GGACCCCCTG	540
AATGAGGATG	TCCTCTTGGC	CATGGAGGAC	ATGGGACTGG	ACAAAAGAACA	GACACAGAAG	600
GCGGCTCGAG						610

(2) INFORMATION FOR SEQ ID NO:476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

GGAGATTGGC	CACCTCCAAG	ATATGGTAAG	GAAAAGTGAA	CAAGGTCTTG	GCTCTGCAGA	60
AGGACTTATT	GCTAGTCTTC	AGGACTCCCA	GGAAAGGCTT	CAGAATGAGC	TTGACTTGAC	120
TAAAGACAGC	CTAAAGGAGA	CCAAGGATGC	TCTATTAAAT	GTGGAGGGTG	AGCTAGAACA	180
AGAAAGGCAA	CAGCATGAAG	AAACAATTGC	TGCCATGAAA	GAAGAAGAGA	AGCTCAAAGT	240
GGACAAAATG	GCCCATGACT	TAGAAATTAA	GTGGACTGAA	AATCTTAGAC	AAGAGTGTTC	300
TAAACTTCGT	GAAGAGTTAA	GGCTTCAACA	TGAAGAGGAT	AAGAAGTCAG	CAATGTCTCA	360
ACTTTTGCAG	TTGAAAGATC	GAGAGAAAAA	TGCAGCAGAG	AAACTCGAG		409

(2) INFORMATION FOR SEQ ID NO:477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

GTATGCCTGT	TCCAGACCAG	CCTTCATCAG	CCTCAGAGAA	GACGAGTTC	CTGAGCCCCG	60
GCTTAAACAC	CTCCAACGGG	GATGGCTCTG	AAACAGAAAC	CACCTCTGCC	ATCCTCGCCT	120
CAGTCAAAGA	ACAGGAATTA	CAGTTGAAA	GGCTGACCCG	AGAGCTGGAG	GCTGAACGGC	180
AGATCGTAGC	CAGCCAGCTG	GAGCGATGCA	AGCTCGGATC	CGAGACTGGC	AGCATGAGCA	240
GCATGAGTTC	AGCAGAAGAG	CGGATACTCG	AG			272

(2) INFORMATION FOR SEQ ID NO:478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

```

GAATTCGGCC TTCATGGCCT ATGCGTGGGG GTGGGGGGGG AGGCTAGAAA GGAGCCCTCC      60
CTCCTCGGGG TGTCTAGGGT GTGCTGGCCA CTGGAAGATT GGAGTCGCTG ACCCAGTGCT      120
GACCCTGACC CTTGGCTGGG TCCACTCTGC AGACTCCACC TGAGGAGACC CACCCAGGGT      180
GAAGCTCGGT GCCCAGGCCT GAACTGAGCC CGGCCGGGTG CAAGGGCTGA GGTGTGAGGT      240
CGGCCAGGC CTCTTCCAG GCCTGAGGT GGCTACAGCT CGAG                          284

```

(2) INFORMATION FOR SEQ ID NO:479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

```

GAATTCGGCC TTCATGGCCT ACTAAATTTT CCAAACGTT GATTTCATA ATACAGTGGT      60
ATGTGCAATG GATAAATGCG CGTTATTTCA AAAATTAAAA TTCTCATTTT CTTTCTTTT      120
TTTCCCCCTT GCTCCACACT TCAAACCTCC CGTTAGATCA GCATTCTACT ACAAGAGTGA      180
AAGGAAAACC CTAACAGATC TGTCTAGTG ATTTTACCTT TGTTCAGAA GCGGCTCCTT      240
TCAGGGTGTG GGTATTCTTA GGTTAGCGGA GCTTTTTCCT CTTTCCCCA CCCATCTCCC      300
CAATATTGCC CATTATTAAT TAACCTCTTT CTTTGTTGG AACGACCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

```

GAATTCGGCC TTCATGGCCT ATTAAAAGAA TGTTCTTTCA TTAAAAGACC AAAAAGAAGT      60
TAAAACTTAA ATTGGGTGAT TTGTGGGCAG CTAAATGCAG CTTTGTAAAT AGCTGAGTGA      120
ACTTTCAATT ATGAAATCTG TGGAGCTTGA CAAAATCACA AAAGGAAAT TACTGGGCGA      180
AAATTAGACC TCAAGTCTGC CTCTACTGTG TCTCATCA CAATGTAGAA GAATGGGCGT      240
ACAGTATATA CCGTGTCTC GAG                          263

```

(2) INFORMATION FOR SEQ ID NO:481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

```

GGAGCAGGAA GAAATGCAAG AGGAGATGGA GAAGCTGCGA GAGGAAAACG AGACTCTCAA      60
GAACGAGATC GATGAGCTGA GAACCGAGAT GGACGAGATG AGGGACACTT TCTTCGAGGA      120
GGATGCCTGT CAACTGCAGG AAATGCGCCA CGAGTTGGAG AGAGCCAACA AAAACTGCCG      180
GATCCTGCAG TACCGCTCC GCAAAGCCGA GCGCAAAAGG CTCGCTACG CCCAGACCGG      240

```


GGAAATCGAC GGGGAGCTGT TGCGCAGCCT GGAGCAGGAC CTCAGGTTG CAAAGGATGT 300
 ATCTGTGAGA CTTCACCATG AATTAGAAAA TGTGAAGAA AAGAGAACAA CAACAGAAGA 360
 TGAAAACGAG AATCTCGAG 379

(2) INFORMATION FOR SEQ ID NO:482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

GAATTCGGCC TTCATGCTTT CTAGGCAAGA GGTCAACAGA AGATTGAGAG AAAGAGGAGA 60
 ACCAATCAGA CTATTTGGAG AGACTGATTA TGATGCTTTT CAACGTTTAA GGAAAATAGA 120
 GATCCTCACA CCAGAAGTTA ACAAGGGATT GAGGAATGAT TTGAAAGCAG CCTTGGATAA 180
 GATTGATCAG CAGTACCTCA ATGAAATCGT CGGCGGTCAG GAGCCTGGAG AGGAAGACAC 240
 ACAGAATGAT CTGAAAGTTC ATGAGGAAAA CACCACAATT GAAGAGTCAG AGGCCCTCGA 300
 G 301

(2) INFORMATION FOR SEQ ID NO:483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 168 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

TGGTCTCCAG AAATGCTTTG GGTTCATCTT TCATTGCTGC AAGGAACCTC CATGCCTCTA 60
 ACACCTCATCT TCAAAAGACT GGGACTGCTG AGATGTCCTC TATTCTGAA GAGCGTATTC 120
 TTGGAGCTGA TACCTCTGTT GATCTTGAAG AAAGTGGGCT ATCTCGAG 168

(2) INFORMATION FOR SEQ ID NO:484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GCAAGCTCTC CATGGAACCC CCTGCCAAAA CAGAAGAGAT AAAACTGGAA AAGGCTGAGA 60
 CAGAGTCCTG CCCAGGCCAA GAGGAGCCTA AATTGGAGGA ACAGAATGGT AGTAAGGTAG 120
 AAGGAAACGC TGTAGCCTGT CCTGTCTCCT CAGCACAGAG TCCTCCCAT TCTGCTGGGG 180
 CCCCTGCTGC CAAAGGAGAC TCAGGGAATG AACTTCTGAA ACACTTGTTG AAAAATAAAA 240
 AGTCATCTTC TCTTTGAAT CAAAAACCTG AGGGCAGTAT TTGTTGAGAA GATGACTGTA 300
 CAAAGGATAA TAAACTAGTT GAGAAGCAGA ACCCAGCTGA AGGACTGCAA ACTTTGGGGG 360
 CTCAAATGCA AGGTGGTTTT GGATGTGGCA ACCAGTTGCC AAAAACAGAT GGAGGAAGTG 420
 AAACCAAGAA ACAGCGAAGC AAAGGACTCG AG 452

(2) INFORMATION FOR SEQ ID NO:485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

```

GTTTGTAAT CACCTGATGA TGGTGATATA GCTGTGGCCA ACGAAATGTC AAGGGAAGTC      60
TGCTGGGGAA GGTAGACGTA GGATAGGAGT ATGGGAAAAA ATTATTCAC TAAAAAGCATG      120
ATGCACAGAG GAGCTATGAT CTTTCTTGT TTTCCCTCACT GGATGTTGTC ATGTCTGTAT      180
GTACTTCCTG GAACTGTGGC ACCATCTTAC AACCATGAAA GGAGCTCACA TGAAATCATG      240
TTGAACATAG CAGAGCGGGA AGATGGAAGG AATCCGAGAT CTATGTTTGA TGTTAAGCGA      300
TGATGTTAAA AACTTAAAAA ACTCCAGAAC TCTCTTACCC CTGGTGCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GAATTCGGCC TTCATGGCCT ACTCAGCTGG AAGCTTTACT CCCTCCTCGA CAGAAAGTGA      60
GGATTACAGA TGACATGGAT CAGGTGGAGC TGAAGGAGTT TTGTCCCAAT GAGCAGAACT      120
GGCGTCAGCA CAGGGAGGCC TACGAGGAGG ACGAAGACGG GCCCAGGCT GGAGTGCACT      180
GCCAGACGGC ATGACGTGGT GCGGGGCAGC GTGGCCCCAC CGGACTAGCA CATGATGAAT      240
GTAAAGTTGG CACAATGAAA ATGACATCGC TTAAATGGCC TTGTGTTTGG GATGTCCTGT      300
GTATGTGTTT AGCATTCTTA ATTGCTGAGT GTCTTTTGG CTTTCTTTT GGTGTAACCT      360
TAAGTTATAG CTTAATTTAT ATTTAAATGT TTAAAGTATA AATCACCTCT AGGCCTCGAG      420

```

(2) INFORMATION FOR SEQ ID NO:487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GGAGTGTCAA GAATAACCGC TCAGGTTGAG TGTA AAAATA TTTTATGGTC CCATCAGCAT      60
CAACCTGCCT TAATGCTTCT TTGGTTGTCT CTTAGCTAG TTCTTATTTT ACAGCACATG      120
ATATATGAAG TGATTTCACA CCATGCCCAA GATACGGGCC ACCCACCAGC TACATGGCAT      180
GATGACTCTG CAGGCCCAAC GGCAGCCTTG ATAATTATAA GGCCATGGGT AATAGCCCCC      240
CAGGGGTTC AAGATCTTCT GGCAGTGGGT GTAGCTCCGC CTACATTCTA TACAACAGAT      300
TCCTTCGCCT GCCTCGAG                                318

```

(2) INFORMATION FOR SEQ ID NO:488:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 487 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```
GAATTCGGCC TTCATGGCCT AGGTGTTTGC TTAAAGGAGG AATAGAAAAA TCAGGTGGTC      60
ACTACTACAA GGGAAAGGGG AATGTGGTTT CAAAAAGGGT TTGCGCTTAT TTATTTTAT      120
AGTAGATACT TATTAATCAA ACATTTAAGA GCAACTCAGT AAGTATTTGT CCAGAATGAA      180
CTGTTCTCAA GACTAGGTTT ACTGCTTGAC ATTAGAGGTT AAGGTGTTGC AATTCTGAGT      240
CTTGTTTTTT ATTACTACCA ACCCCCACCC CCGCCGATAT TACTTCATCT CCCTCCAAGG      300
TCACTGAAGT TTTTCATAAC TATTTTAACA GATATTGCAA TAAATGTACA GTAATTTAAC      360
TATCCTTCTT GCTGGGCATG TCAAAGTGTT TTCTATTATT ACAGATAATG CTGCAATGAA      420
TCTTTATTTA TATAATACAC TTTTATCCAG TTGTCATTTT TTCCTTGTCT TATATTCTCA      480
CATGGAA                                         487
```

(2) INFORMATION FOR SEQ ID NO:489:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 149 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

```
GCGATTGAAT TCTAGACCTG CCTCGAGACA AAAACTGTGA ATAGTGAGTG ATTTAAAAAA      60
AAAAAATAAA CTGAAAGGAA AATGTTGAA TGTTTGAATC TTGCCTAGTC CCCTCACCCC      120
CAAGGCTGGC TTCTAGAGTT AAGCTCGAG                                         149
```

(2) INFORMATION FOR SEQ ID NO:490:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 259 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

```
GCAAATTTTG GAAGATTTAG ACCATTATTT CTCAAAATAT TTCTTACCTG CTCTCTCCTC      60
TTTCTCCAC TCCTCCCAT CACCTTCTGG CACTTCATT GTTCATATAT TGATATGCTT      120
AATGATGTTT CTGAAGATTT ATTCATTTT CCTTTATTCC TTTTATTCT GTTCCTCAGC      180
CCAGATCATT TCAATGCACA TATCCTCAAG TTGCTGATT CTTTCATTTC CTGCTCAGAT      240
CTGCTGCTGG CCCCTCGAG                                         259
```

(2) INFORMATION FOR SEQ ID NO:491:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 320 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

```
GAATTCGGCC TTCATGGCCT ACAAATGTTT AATCAGAGAC TCATATTCAC CTTTAAGTAA    60
AAAACATACT TCTTCCCCC TAATAGTCAC AGCATTCTGC AGAGCTAAAG AAGGAGACCA    120
GGAGTCTGTG GGAGCAAAGA TCATTTGTG AAGCTAGAGG TCCAATTTAA AAGCAGTTGC    180
TGCTACAAAT TAAAACATAT TTGCATTCTG CCTAAAATAG TTGTCTCTTT GAACGTTGGG    240
TGCCTTTTTT AGGTTGCTTT GTGAATAATA TGCACAAAAT GAAAATGTTA AAAAAACAT    300
GTAGCCTGCT AACCTCGAG                                         320
```

(2) INFORMATION FOR SEQ ID NO:492:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 224 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

```
GAATTCTAGA CCTGCCTCCA GCCACTTCAA ACCTTTGGTG ACCAAAGTGG GGTAAAAACA    60
AGCACCTGCG TGCCTGTGGG TTATTCTATG CTCTCCAATA TATATAAATT TTAAGAAGTT    120
TTTCTTGAGG TGGTCAGTTC TTAACCAAG AAAGTGGTAG TAGTTGATTT TAATTAGTGT    180
AAAGTTGTCT TCGTAACTTC CGTGTGGTT GGAAATAGCT CGAG                                         224
```

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 320 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

```
GAATTGCCTT CATGGCCTAC CGAATCAGAC AGAAGAAAGC CCAGGGCTCC ACTTCTTCTA    60
CAAGGTTGCA TGAGCCCGAG AAGAATGCCA GAGAAATAAC ACAGGACACA AATGATATCA    120
CATATGCAGA CCTGAACCTG CCCAAGGGGA AGAAGCCTGC TCCCAGGCT GCGGAGCCCA    180
ACAACCACAC GGAGTATGCC AGCATTGAGA CCAGCCCGCA GCCCGCGTCG GAGGACACCC    240
TCACCTATGC TGACCTGGAC ATGGTCCACC TCAACCGGAC CCCCAGCAG CCGGCCCCCA    300
AGCCTGAGCC GTCCCTCGAG                                         320
```

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 504 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

```

GAATTCGGCC TTCATGGCCT AGGTAGCTCT ATGGTTTTC TCGCGTTCTT GAGTCGGGAA      60
ATGGCCGCTG TGTGGTTGCA ACGGAGATAA ATTCCCGGAA CCGCGATTCT GCGTGTCAAG      120
AATTCGAATT TAGAGTTTAA TTTCTCAGAG CATTCTCTCC AGGAAGAATT TTTACAGTAT      180
CTCAAAGACT TCACTTGACT TCTTGATCCT GCATAAAACC AAGGAGAAAA GAAATGGGTC      240
GCTCCAATTC TAGATCACAT TCTTCAAGGT CAAAGTCTAG ATCACAGTCT AGTTCTCGAT      300
CAAGATCAAG ATCTCATTCT AGAAAGAAGC GATACAGTTC TAGGTCTCGT TCCAGAACAT      360
ATTCAAGGTC TCGTAGTAGA GATCGTATGT ATTCTAGAGA TTATCGTCGC GATTACAGAA      420
ATAATAGAGG AATGAGACGA CCTTATGGGT ACAGAGGAAG GGGTAGAGGG TATTATCAAG      480
GAGGAGGAGG TAGAAACCCT CGAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

```

GAATTCGGCC TTCATGGCCT ACCAACTTAG TCATTGAAG CCCAAGAGTC TAATTTTATA      60
TGCCCTGCCA ATGTCCTCAT CTATTGCAGA ATGNATAATT ATCTATTTGT TTTGGACTAT      120
ATGTTACAAA AATTAAAAAC ATAAGATCCT CTCTCTATAT TTCATTATTG GTGAACCCAC      180
ATTGCTCGAG                                         190

```

(2) INFORMATION FOR SEQ ID NO:496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

```

GAATTCGGCC TTCATGGCCT AGGTAAGAAA ATCGTCAATG AATTGTGGCA TGACCAGGTG      60
GAGAGTAAGT GTCATAAAGA GGGATAGTGG ATAGTATAAT GTCAGGCACC TCAAAGGAAC      120
TGGGCAGGGA GTTAGGGAGT AAAAAGGGCG GTGGTCTGGA AGCAGAAAGG AGGAGCAGTG      180
GTCCAGTAGG GGCTGCAGAG CTGCAAGGCT TTGCCTCAAT CCTGTCAAAG GCAACTTCAA      240
GCTTTCCAGG AGCCATACTC CTTCAATTGT TCATTACTTT CTAGATTAGG AATCACCAC      300
TCGAG                                         305

```

(2) INFORMATION FOR SEQ ID NO:497:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

```

GAATTCGGCC TTCATGGCCT AGGTGGACCA ATGTACAGCA CTCAGGTTC TGGCCAACTG      60
GGTGGACTAT TTCAGTACTC TACAGGTGCC TCAGTGGAGG GAGAGCCCAT TGTCCAGGTG      120
CTTCCTGGGA CAATACCAGA GCGCTCTGGG AAAAGGGCTG CTTGCAGGCA CGAGGGCTCA      180
CAATGAGCCA TGGTGGGCCA CCGCCACGGC CCATGCAGCC TAATAGCAAG CCAAGGCAGG      240
AAGCTGTGAG AGCTGCTCAA CAGTGCCCCC TAGGGACTGG TTACTTCCTG ACCCTAACCT      300
CCGGAAATCT GCTGTCAAAG GCAGATTCTT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:498:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 160 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

```

GAATTAGGGG CTTTTTCATC CTTAGGAGAC CTGAGTCCTC AAGAAAACCC TTTTCTGGAA      60
GTATCTGCTC CTTCAGAACA TTTTATAGAA AAGAATAATA CAAAACACAC AACTGCAAGA      120
AATGCCTTTG AAGAAAATGA TTTTATGGAA AACACTCGAG                                     160

```

(2) INFORMATION FOR SEQ ID NO:499:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```

GAATTCGGCC TTCATGGCCT ACTCGATCTC CTGACCTCGT GGTCCACCCG CCTCGGCCTC      60
CCAAAGTTCT GGGATTACAG ACGTGAGCCA CCGCGCCCGG CCTTGTCTG GATTTTTTAA      120
CCAAGCACTA TTATTATAG TTGCGTTAA ATAAATAGG ATGGGTTTGA TAAGTCACCA      180
CTTGGTGCTT TAAATTCTGC CATCATCTT TCTAGGAGTG TAAGATATAG AGATACACAT      240
AAGCAGAAAA TTTTTTTTAA CATGAGGATA CTCGAG                                     276

```

(2) INFORMATION FOR SEQ ID NO:500:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```

GAATTCGGCC TTCTGGCCTA GACCTGCCTC TGATATGTAC TTGGTTTTTA AAAACCCATT      60
TTGTTCTCTC TTGTTTCTC TCTATTTTCA CCTAGTATCA GAAGGCCAGG CGAGACTGCA      120
ACACTGCTCA TCACCCCGCG GCGTGATCCC TGCTCTTAGG TGCTGGGCAG AGGGGAAGGG      180
TGGTCAGGGT GAGGATGGTG AGGGAGGGCT GGTGAGGGGC TCAGAGGAAT ACTTGAACA      240
ACAGCAGTGT CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:501:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 635 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```

GAATTCGGCC TTCATGGCCT AGTGGTTTGT TTGTTGTTGT CGGAGACAGG GCCTCGCTTG      60
GTCTCCCAGG CTAGAGTGCA GTGGCATGAT CACGACTCAC TGCAGTCTCG ACCTTCTGGG      120
CTCAAGTGAT CCTCCTGTGT CAGCCTCCCA CACAGCTGGG ACTACAGGCA CATGCCACCA      180
CATCCAGCTA ATTTAAAAAA CATTTTTTTT GTAGAAATAG GGTCTTACCA TGTTGCCGAG      240
GCTAGTCTCA AATTCCGGGG CTCAAGCAAT CCTCCCACCT CACCTTCCCA AAGTGCTGGG      300
ATTACAGGCA TGAGTCACCA TACTTGGCCC GAGTGAGCCA AGATTGCACC ACTGCACTCC      360
AGCCTGGGCT ACAGAGCAAG ACACTATCTT AGATCCNNAA AGGAAAAAAA AAAAAAGAAG      420
AGAAAGAACC AGAGAAACAT AAGGAAGAGT GAGAGGAAGA AAGAAAGATG CAATTGGGGA      480
AGAAATGAAA AAGAAATGAA TAAAGAATAA AATAATGTAA CGGTCAATAA ATAGGACTTG      540
TGAATGGAGG CCTTAGGCC AAAGGCTATG ATTAATTTCA AGCTATGTTA CTGAAGTCCA      600
TAAACAAAGG ACTCAGATCT AAATGGGTAC TCGAG                                     635

```

(2) INFORMATION FOR SEQ ID NO:502:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

```

GAATTCGGCC TTCATGGCCT ACCCGTAGAA ATCCCCCTTT CTCTAATAGC GAGGCTCTAA      60
CCACACAGCC TACAATGCTG CGTCTCCCAT CTTAACTCTT TGCCTTTGCC ACCAACTGGC      120
CCTCTTCTTA CTTGATGAGT GTAACAAGAA AGGAGAGTCT TGCAGTGATT AAGGTCTCTC      180
TTTGGACTCT CCCCTCTTAT GTACCTCTTT TAGTCATTTT GCTTCATAGC TGGTTCCTGC      240
TAGAAATGGG AAATGCCTAA GAAGATGACT TCCCAACTGC AAGTCACAAA GGAATGGAGG      300
CTCTAATTGA ATTTTCAAGC ATCTCCTGAG GATCAGAAAG TAATTTCTTC TCAAAGGGTA      360
CTTCCACTGA TGGAAACAAA GTGGAAGGAA AGATGCTCAG GTACAGAGAA GGAATGTCTT      420
TGGTCCTCTT GCCATCTATA GGGGCGCTCG AG                                     452

```

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

```

GAATTCGGCC TTCATGGCCT ACAAATTGT CTTGACATAA GTAATTTGGG TATGCTGTAT      60
AAAGGCTTCT AAGAAATTAAG AAACATGGCC CGGGTTGCAA ATTTTAATGC ATGACTACCT      120

```

TTTTTCTAT AGAATATAGC TTTTGTGAGA TTCTCAGCAG TGGCTCTGAT CCAGAAAACA 180
 TTAAGAACCA CTGGTCATGA GTGGTGATT TCAGCTTTT TGGTCTTAAC CCACTTAGGT 240
 GGGACAGAAG CTCCTTATCT CACCTATACC ATCCAGCATC CTCGAG 286

(2) INFORMATION FOR SEQ ID NO:504:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 424 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

GAATTCAGCC TTCATGGCCT AGAGGGGTTT AGGATTCAAA GCAAAGGGA GACAGCTACT 60
 AAGTAACTA CAAAATAATT GCTAACTGA AAATTGTATA AAGTGACTG GACAGATGAT 120
 GTTCCTAATT CTTATCCATG AAATATTTTC TGCCTTCTTA GAGGAAATAG CACCTGACAC 180
 AACACTAGCC ACATTGTAGG TGATCAATCA GCACATGTCT AAATAAATTA ATTAAAAAAG 240
 AATCAATTAG AAATCCACT GAAAATCTT CTTAAATATA ACCAACTTCA TTATGACAAG 300
 CTATGAATAT AGAGCTTACA TACATGTTAT ATATCAATAT GTGAGTAGAT AAAGAATGAA 360
 TGCCTTAAAT TGTGGATT TTTATTGTTT TTGTTCTTGT TTTGGAGATG GGGTCTCACT 420
 CGAG 424

(2) INFORMATION FOR SEQ ID NO:505:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 204 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

GAATTACTCA GTTTCAGGT TCTTCCTAGC TCGGGGCTTT TAAATTTTGA AATCTAAACA 60
 TTCTTTCCCA CCATCCTTTT TGACTGTTGA CCTTGGTTTT CTCTTCTAAG TTTCTGTCCC 120
 TCTGCTTCCT TACTTTTTTT CCTTTTGAA TTCTATCTTT ATCTGTCTTT TGTTCACTTT 180
 TTAATGCTAT ATATGGATCT CGAG 204

(2) INFORMATION FOR SEQ ID NO:506:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 218 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGAGA TGTACAGTAA TAAGTATGCA 60
 CAGAAATGTT AGATTATTTT TGAAGATGTG GAGAACTAC TGTTATTTT GCTTATATTC 120
 TTCTCTAAAA ATTCACTAAA TGAATAACAG TTATTGGTTT TGCTATTCAA GATAATTATA 180
 AAAATATCTA TTATAGCTAA TCTTCACATG AACTCGAG 218

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

```

GAAGTTTAAC ATTCTAACTG TTGGTAAAT CTCCTGGTG CCACCTTGTC GCACCCCTCT 60
GTTATGAGGC ACAGTTAGTG GGTATTGAG AGGTTTGTC AGTGAAGCTC CTGCCACTGT 120
AGACCTAAAT GTTCTCTCC CTGTTGAAGT GACCTGCCTT CCTCTTAGT ACCTAACACA 180
GTTGGCAAAG AGCATGGCTA ACTCAAACCC TTTCTTTGG GGGCAGGCTT CCCTTTCTCT 240
CTGGCAGGTA TATTAAAAA TTACAAAATA GTAAATTGC CAAATTTTC TTGGTGTGTA 300
GCAAGGCATA AAGACTGAAA AATATCTTAT GAATTAGTTC ACTTCCCTCG AG 352

```

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

```

GAATTCGGCC TTCATGGCCT AAAATGATAC AGTGTGCAGA ACTGGACCCA GTAGGGAATG 60
ATAAAATGTA CAGATGTGCA GAACAGGACT TGGTAGGACT CAGCAGAGAA AACAGGAGGA 120
GAGATGAAAA TGATATGGTG TGCAGAACTG GACTCAGTAA GGTGCGGAAA GGGGAAGGAT 180
TCTGACAGAA TCCAGCACAA AACAGAGAG GGTGCAGAAA AAGAGATTTG GTCACCTTAGA 240
CGTGTGGAGT TGGAGGAGCC TGTGGGAAAT CCAGGATCTC GAG 283

```

(2) INFORMATION FOR SEQ ID NO:509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

```

GAATTCGGCC TCATGGCCTA CTCTCCTTTC TTAAGTTGTG TACTTGGGGG CACTTTTGAT 60
TTTGGTCCCA CATCATTGAG GAAGCTGGCC CAGAGTTCGT CCTCCTTCTT TTTCTGGCA 120
TCCTCTGATC CAATGCCTTT TTCCTGCTCT GCAGCGTCAT CTTCCTCCTC ACTACTGCTT 180
CCCTCAGATT CTGAATTGGC ATCCTCCTCT TCCTCTTCTT CTAATGAGAG GCCACCTTGT 240
CTTCTCTTCC TGGCTGGAAT GCTCTGGGCC TTCTTTTTT TCCCTTGGGT TTTCTGTGTC 300
TGCTCTTCAC CATTAGGCCA TGAAG 325

```

(2) INFORMATION FOR SEQ ID NO:510:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 281 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

```
GAATTCGGCC TTCATGGCCT AGACAGGAGG TCATTGGGGA TTTTAGAAGG TTACACTGGA    60
TACATTTCCTA TTAAGCTTCA CGATATCCCA CAGGTCCATT CTGTGTGAAA TGGTCTAAAA    120
ATTTCCTGTT CTCATGCTTC ATTTTCTTCT TTTAGTAATA TTCCTAATTG TGTAAAATAG    180
TATTTCTTTT CATTATCTT AATTATGTTA TATTAAGATA TCATGTGTAT GCTTAAATTA    240
TACTTTTGGG CTTCAAATGA GTGACCCAC TCAGACTCGA G                          281
```

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

```
GAATTCGGCC TTCATGGCCT AATCCCTTG ACTCAAGACA GCTAACTTCA TTTTCAGAAC    60
TGTTTAAAC CTTTGTGTC TGGTTTATAA AATAATGTGT GTAATCCTTG TTGCTTTCCT    120
GATACCAGAC TGTTCCCGT GGTGGTGTAG AATATATTTT GTTTTGATGT TTATATTGGC    180
ATGTTTAGAT GTCAGGTTTA GTCTTCTGAA GATGAAGTTC AGCCATTTTG TATCAAACAG    240
CAGCTCGAG                                     250
```

(2) INFORMATION FOR SEQ ID NO:512:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

```
GAATTCGGCC TTCATGGCCT AATTGATTCT AATCTTCCC AAACAGTGCT GTGGCAATGT    60
ATGAAAGTAA TAAAAATAAT CCTTTTCTG TTAACAAAAA AATTGCTGTT ACTTGCTGTT    120
TTGTTATGCT TTGCTGGAG ATTTCCAC CCATCTTAAA GCAGCAACTT CAGGATGGGG    180
GAATCAAGCA AAACATGGT GAAGAGATTC ATTAAAGAG GACAAGTCTC GAG          233
```

(2) INFORMATION FOR SEQ ID NO:513:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

GAATTCGGCC	TTCATGGCCT	AGTCACCTTT	TGTGGGAACT	TCTCTCAGCG	AAGCGGAGCA	60
TGCGAATTTG	ACATCATGAT	TGTCTGAAAA	TTGGTAAGCC	ACTATCCCAG	AAAGAGCTCC	120
CTATGCCCAG	GGCTTGCAAT	GCTAAGAGAA	GGAGGCAGGA	GAGAGACAGG	GAGCGACACT	180
ACATTTGGTG	GGGTGAGGAT	ATGAGGTTCC	TTGGACATCA	TGGCCTCCAG	TGAATATGTG	240
GGTGATGGCT	TGGAAGTTAA	GCTTTTTC	TAGTGCCCCA	CAAAAGAGTA	CCCTCCACAA	300
CCCATCTGTG	GACCACAGCA	GTGCCTCTCA	ACAAACATGT	GCCCCAAGGA	GTCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

GAATTCGGCC	TTCATGGCCT	AGAATAGAGG	AAAATAGCCG	CCTGGTGGCT	AGACAATTTA	60
GGTGTAGAAA	ACACATTTAT	ATGGTTCTTT	GAATGTAACA	GTGGTAAAGA	ATATAGGTTT	120
AGTTGTTGCT	GCTAAGTAGG	GGGAAATGAC	ATTTTATCT	GGTATGTTTG	AGAATAAAGT	180
AAATTTCAAA	ATTTGAGATG	ATCGAAGTTT	TTATTTATAA	ACTTAAGTAT	TATTATAATA	240
TGTACATAT	TTTATTCTTT	AAAAATTGTA	ATTCAGAGAG	TGTAACAAAA	TGTACTTCCT	300
CACTTTCTTG	CTTTTGTGTT	CCCAGAAGTA	ACTCGAG			337

(2) INFORMATION FOR SEQ ID NO:515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

GAAAAGATGG	AAGAAAACCA	CCATAGCACT	GCAGAAGAAC	TACAGGCTAC	TCTACAAGAA	60
TTATCAGACC	AGCAACAAAT	GGTACAGGAA	TTGACAGCTG	AAAATGAGAA	GCTGGTGGAT	120
GAAAAGACGA	TTTGTAGAGAC	ATCCTTTCAT	CAGCATCGAG	AGAGGGCAGA	GCAGCTAAGT	180
CAAGAAAATG	AGAAGCTGAT	GAATCTTTTA	CAAGAGCGAG	TAAAGAATGA	AGAGCCCACC	240
ACTCAGGAAG	GAAAAATTAT	TGAAGTGGAG	CAGAAGTGCA	CAGGTATTCT	TGAACAGGGC	300
CGCTTTGAAA	GAGAGAAGCT	ACTCAACATT	CAGCAGCAGT	TGACCTGTAG	CTTGCGGAGA	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

```

GCGAGTGAGC CGGGGTAGCA TCACCTCACT CCAGCCTAGG TGATGACAGA GTTAGATTTT    60
GTCTCAAAAA AGAAAAAGAA AACAAATCCA GGATTATTAT TTCTACGTAA ATGTGACATA    120
TTATTCTAT  GATATTATTT CTTTGATCTC GTAGCCACAC TGTTCCTAAT AATGATTATG    180
AGAAAAAGTA CCCTCTGTTT GAAGGCAATC ATGGGGAAAA TATAATTAC  AAAGATTATTT    240
AAAATTAAAA TCCTGTGTAT TTCAAAGAC  GATGGTCTTA TTTAAGAAA  AATAACCTTG    300
CAATTCATT  GCTTTTTCAT TGGCTCGAG                                     329

```

(2) INFORMATION FOR SEQ ID NO:517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

```

GAATTCGGCC TTCATGGCCT AGTCTTTTCA AGTACACAGA GAAATTTTGC TTGAATTTCT    60
GGAGGAAGAG TCCAGGGTTC GGGAAAAGGG ACTGGGTGGT ATCTATCTGG GGCCCCAGAC    120
AGCGGCACCT CTTTCTTCTG TGCTGGAATT CGGCGAACAA TCATATCATC TTTTCCAAA    180
TCCGGAAGTA CAAGTTCACT TTCTCTACAC TGTAATAATTA TATCTCGCTC TACAGAATCA    240
TCTTGCTCAG AGAACTTTCT AAAGTCTTCA AAAGCTCGGA GAACATATGG ATTTGCATGG    300
AAAGCCCCAG TCTTTCTGAC AAAGAAATCA TCATTCTCTA AGTCAGGATC CAGGGCTGCC    360
ATCTCGAG                                     368

```

(2) INFORMATION FOR SEQ ID NO:518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

```

GAATTCGGCC TTCATGGCCT ACGCTGAGAT CAAGATTCGG AGTTTGGGCT GCCTAATAGC    60
TGCAATGATA CTGTTGTCTT CACTCACCGT GCACCCCATC TTGAGGCTTA TCATCACCAT    120
GGAGATATCC TTCTTCAGCT TCTTCATCTT ACTGTACAGC TTGCCATTC ATAGATACAT    180
ACCCCTTCATC CTGTGGCCCA TTTCTGACCT CTTCAACGAC CTGATTGCTT GTGCGTTCCT    240
TGTGGGAGCC GTGGTCTTTG CTGTGAGAAG TCGGCGATCC ATGAATCTCC ACTACTTACT    300
TGCTGTGATC CTTATTGGTG CGGCTGGAGT TTTTGCTTTT ATCGATGTGT GTCTTCAAG    360
AAACCACTTC AGAGGCAAGA AGGCCAAAAA GCTCGAG                                     397

```

(2) INFORMATION FOR SEQ ID NO:519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 640 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

```

GAATTCGGCC TTCATGCCTA CTTTGGTAAC AGAAGAGAAG ACTGTGGAGC CAGCTACCGT      60
CTCAGAAGAA GCAAAGCCTG CATCTGAACC TGCTCCTGCC CCTGTGGAAC AGCTGGAACA      120
AGTAGACCTG CCCCAGGAG CAGACCCCGA TAAAGAAGCT GCCATGATGC CTGCGGGTGT      180
TGAGGAAGGT TCATCAGGTG ACCAGCCGCC TTATCTGGAT GCCAAGCCTC CAACTCCCGG      240
GGCCTCGTTT TCCCAGGCAG AGAGCAACGT AGATCCAGAG CCTGACAGTA CCCAGCCACT      300
TTCAAACCA GCTCAGAAGT CTGAGGAAGC CAATGAGCCA AAGGCCGAAA AGCCAGACGC      360
CACTGCAGAT GCTGAGCCTG ATGCAAACCA GAAAGCCGAA GCTGCTCCTG AGTCTCAGCC      420
CCCAGCTTCT GAAGATTAG AGGTGTGATC TCCAGTTGCT GCAAAGGATA AAAAGCCAAA      480
CAAAAGCAAG CGTTCAAAGA CCCCTGTTC GGCAGCTGCA GTGAGTATCG TGGAGAAGCC      540
CGTCACAAGG AAGAGTGAGA GGATAGACCG GGAAGAACTC AAGCGGTCCA ATTCTCCTCG      600
GGGAGAAGCA CAGAAGCCTT TGAATTAAA GAACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:520:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 469 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

```

GAATTCGGCC TTCATGGCCT AGCAAGAGAA AGAGAAGTGC AAACACTCCC ACGGCGAAGC      60
GCCCTCCGTG GACGCGGATC CCAAGTTACC CAGTAGCAAG GAGAAGCCCA CTCACTGCTC      120
CGAGTGCGGC AAAGCTTTCA GAACCTACCA CCAGCTGGTC TTGCACTCCA GGTGCCACAA      180
GAAGGACCGG AGGGCCGGCG CGGAGTCGCC CACCATGTCT GTGGACGGGA GGCAGCCGGG      240
GACGTGTTCT CCTGACCTCG CCGCCCTCT GGATGAAAAT GGAGCCGTGG ATCAGAGGGA      300
AGGTGGTTCT GAAGACGGAT CTGAGGATGG GCTTCCCGAA GGAATCCATC TGGATAAAAA      360
TGATGATGGA GGAAAATAA AACATCTTAC ATCTTCAAGA GAGTGTAGTT ATTGTGAAA      420
GTTTTCCGT TCAAATTATT ACCTCAATAT TCATCTCAGA ACGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:521:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 202 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

```

GAATTCGGCC TTCATGGCCT ACCCGTTTCC TCTAGTTTCT TCCTGTAGTA CTCCTTTTT      60
AGATCCTAAG TCTCTTACAA AAGCTTTGAA TACTGTGAAA ATGTTTTACA TTCCATTTCA      120
TTTGTGTGT TTTTAACT GCATTTTACC AGATGTTTGT ATGTTATCGC TTATGTTAAT      180
AGTAATTCCT GCGGCCTTCA TG

```

(2) INFORMATION FOR SEQ ID NO:522:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 492 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

GAATTCGGCC	TTCATGGCCT	AAATTTAATG	AAGCAAAATT	CCATACATCA	TTTTGAAAAT	60
AGTGTTCCT	TCCCTGATAG	GCCTGTTCTG	CATCATTCCT	TTAGCTTCCT	TCTGCCCTGT	120
TTATCACTTG	GTCCCACTTT	TATATTTTTC	CTCTTCGGTC	CAGAATTTC	TATTAGTTT	180
CTTGTAATTT	GCCTACTCCC	TCCCTTCTCC	ATGATTCAGC	CTAGCTTTTC	CGTCCTCTGT	240
GGACTTGGGT	GTGCCTTCCT	CTGGGCCACC	TCGTCTTTTG	CTGCTGTTAG	CCCTCCCGCC	300
TGCGCACCTG	CCACTTCACC	CTCGCCTGTG	GTCCACTTAC	GTTCCACTCA	GCCCGGTGAG	360
TCCTGCTTTG	TTCTTCTCCA	CGCCTTGGT	CTCCCGTGTG	TCTTATCTAG	CTCTGGTTCC	420
TTCTCGTCTC	CACATTAT	TTGTTTCTT	CCTGTGCTTG	TTAGTCCTTG	TGCACTGGC	480
CCTTTTCTCG	AG					492

(2) INFORMATION FOR SEQ ID NO:523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

GAATTCGGCC	TTCATGCCTA	GGAAATTTCA	CCATTGGGTC	TCCCCCTTTG	TGGGTGAGCA	60
GGTGGTCAAG	ACAGGGGGCA	GCAGTAAGAA	GCTACAGCCC	GCCAGCCTGC	AGTCTCTGTG	120
GCTCCAGGAC	ACCCAGGTCC	ATGGAAAGAA	ATTATTCCTT	AGATTGTATC	TAGATGAAGA	180
AATGGGGCCC	CCTGGCAGCA	GCCCAACACC	AGAGCCTCCA	CAAAAGAAG	TGCAGAAGGA	240
AGGGGCTGCG	GACCCAAAGC	AGGTCGGGGA	GCCCAGCGGG	CAGAAGACCC	TTGATGGATC	300
CTCACGGTCT	GCAGAGCTCG	TCCCCAGGG	CGAGGATGAT	TCTGAGTATT	TGGAGAGAGA	360
CGCCCCTGCA	GGAGATGCTG	GGAGGTGGCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

CGATTGAATT	CTAGACCTGA	CCAAAGACCT	TCCGTACAGA	TTGACCGCAG	AATGTCAGGG	60
AAAGTTAGGA	GAAGAAGTTC	TGAGAAGACT	GACTACAGAT	TGGCTGGCCT	GGCTGACCCA	120
GGAACCTCTG	AGCAGACTGA	CCTCAGATTG	TATGGCCTCG	TTGACCACAA	AACATCTGTA	180
AAGACTCACC	ACCAAGTGTA	CGGCCAAGCC	ACTGAACTAG	CTGAACACCA	GGCTATTGAC	240
CAAGCTCATA	GTAATGCTGA	TCAACCTCCA	GTTGACAATG	CTCACTACAC	TGAATCTGAC	300
CAGACTGACC	ACTTAGCAGA	CAGACAAGCT	AATCATAAAG	ACCAGCTGTC	TTACTATGAA	360
ACACGTGGCC	AGTCTGAAGA	CAGAATATTT	CCCCAGTTAG	GCAACAGCAA	AGAGGACAAA	420
GAGGCTGACT	ACAGAGTACA	ACCCTGCAAA	TTTGAGGATA	GCCAAGTAGA	CCTCAATTCC	480
AAGCCTTCAG	TTGAAATGGA	AACTCAGAAT	GCAACCACTA	TCCCACCCTA	CAACCCAGTT	540
GATGCCAGAT	TCACCAAGTA	ATTCCAAGCA	AAAGACCAAG	CTCTTTTCCC	AAGACTCGAG	600

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

GAATTCGGCC	TTCATGGCCT	ACTTTCTTCT	GCTGGCTTCC	ATCTTGCCAC	ACTTTCTTGC	60
TCTTCCTTCT	AACTGAAAGA	CTACTTCTCC	ATCCCCTCTG	CAGGCTCTTT	TGCTCCACCT	120
GATATTTAAA	TGTTGGAATG	CCTAGAGTTG	TTCTGACCCT	TCTTTATCTA	CCCCGATTTT	180
CTCAGTGATC	TTATGCAGAG	GTCTCCCAA	GTTTACATGG	CTATCCTTGA	CCTCCTTCCT	240
GAACTGCAGC	TGGTGTGAGC	TGCCGTCACT	TGGATGTTTA	ATCAGCAACT	CAAGGTTTAC	300
GTGATGATTA	GACCGCAGTT	ACCCCAGAC	TTCTTATCC	CTTAGTTTTC	CCCCTCTCAT	360
TAAGTTCACT	TCCATTCACT	TTCTTGATGA	AGCCAAGTAT	TTCAGAACTA	GCCTTGTTTC	420
TTCTTTTCA	CTTCCCCCA	TATCAATTC	AGACTACCA	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 559 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

GAATTCGGCC	TTCATGGCCT	ACATTGTAGA	AGAGATCACA	GAAACCACAA	AAGGTTTTCT	60
GAAGTATATG	GATAATCAAT	CATTTGCAAC	TGAAAGTCAG	GAAGGAGTTG	GTTTGGGACA	120
TTACACCTTCA	TCCTATGTGA	ATACTAAGGA	AATGCTAACC	ACCAATCCAA	AGACTGAGAA	180
ATTTGAAGCA	GACACAGACC	ACAGGACAAC	TTCTTTTCTT	GCTGCTGAGT	CCACAGCAGG	240
CAGTGAGCCT	GGAAGCCTCA	CCCCTGATAA	GGAGAAGCCT	TCGCAGATGA	CAGCTGATAA	300
CACCCAGGCT	GCTGCCACCA	AGCAACCACT	CGAAACTTCC	GAGTACACCC	TGAGTGTGTA	360
GCCAGAAACT	GATAGTCTGC	TGGGAGCCCC	AGAAGTCACA	GTGAGTGTC	GCACAGCTGT	420
TCCAGCTGCC	TCTGCCTTAA	GTGATGAGTG	GGATGACACC	AAATTAGAGA	GTGTAAGCCG	480
GATAAGGACC	CCCAAGCTTG	GAGACAATGA	AGAGACTCAG	GTGAGAACGG	AGATGTCTCA	540
GACAGCACAA	GGCCTCGAG					559

(2) INFORMATION FOR SEQ ID NO:527:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 318 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

GAATTCGGCC	TTCATGGCCT	ACGCAGTGGT	TCAATTTTCT	TCGAAACGGT	GTGGTCCCTG	60
CAAAAGGATG	TTTCTGTTT	TCCATGAGCT	GGCTGAAACT	TGTCACATCA	AAACAATACC	120
CACATTTTCA	ATGTTCAAGA	AAAGCCAGAA	GGTAACCCTA	TTCTCAAGAA	TCAAAAGAAT	180
AATTTGCTGT	TATAGAAGTG	GATTCATGAG	CAACCTGATT	TTTGAGTTTT	GTGGAGCCGA	240
TGCTAAAAAA	TTGGAAGCCA	AGACTCAAGA	ATTAATGTAA	GCTGATCTCC	AAGGCAAAAT	300
ACACTTGTGC	CGCTCGAG					318

(2) INFORMATION FOR SEQ ID NO:528:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

```

GGCACAGACT TACCGGACAC ACAGGTCATG GGACACAGAG TCATGGGGCA CACAGGTTCA      60
CAGGGCACAC AGGCTCACGG GACACAGAGT CATGGGACAC ACAGGCTCAC AGGGCACACA      120
GGCTCACAGG ACACACAGGT TCATGGGGCA CAGAGTCATG GGGCACAGAC TCACAGACTC      180
ACAGGTCATA GACGTCATG GGGCGCAGGC TCACAGGGCA CACAGACTCA GGGCACACAG      240
GTCATGGGG CACAGAGTCA TGGGGCAGGG CTCGAG                                276

```

(2) INFORMATION FOR SEQ ID NO:529:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

```

GAATTCGGCC TTCATGGCCT ATTCTGTTCT TAAATTGA ATGAAAGTTT GGCATTTTAA      60
AAACTTTAG CTGATTTAGG AGTATAATT TAAGCAGATT TTAGAGTAC GAGTGTCAC      120
ATATTTAACT AAACATTCAA AAATTAGTTA AAATCAATGA ACTTGGGAAG GATCCTCGAG      180

```

(2) INFORMATION FOR SEQ ID NO:530:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

```

GGGGACAGAA GATGTGCTCC AGGGTCCCTC TGCTGCTGCC GCTGCTCCTG CTA CTGGCCC      60
TGGGGCCTGG GGTGCAGGGC TGCCCATCCG GCTGCCAGTG CAGCCAGCCA CAGACAGTCT      120
TCTGCACTGC CCGCCAGGGG ACCACGGTGC CCCGAGACGT GCCACCCGAC ACGGTGGGGC      180
TGTACGTCTT TGAGAACGGC ATCACCATGC TCGACGCAGG CAGCTTTGCC GGCCTGCCGG      240
GCCTGCAGCT CCTGGACCTG TCACAGAACC AGATCGCCAG CCTGCCCAGC GGGGTCTTCC      300
AGCCACTCGC CAACCTCAGC AACCTGGACC TGACGGCCAA CAGGCTGCAT GAAATCACCA      360
ACGAGACCCA GGCCCTTCAG CACCGTTCAC AGTATTTTGA AGGTGTTGTG AAGTGCAATA      420
AGCTGGAAAT ACTGGAGACC ATCGTGGACA GAATAGTAAG AGCCCTCGAG                                470

```

(2) INFORMATION FOR SEQ ID NO:531:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

GAATTCGGCC TTCATGGCCT AGAAAATTCC AGAAAGGATA TTAAAGAAA TACAATAAAC	60
TATTGGAAAG TACTCCCCTA ACCTCTTTTC TGCATCATCT GTAGATACTA GCTATCTAGG	120
TGGAGTTGAA AGAGTTAAGA ATGTCGATTA AAATCACTCT CAGTGCCTCN TACTATTAAG	180
CAGTAAAAAC TGTTCTCTAT TAGACTTTAG AAATAAATGT ACCTGATGTA CCTGATGCTA	240
TGGTCAGGTT ATACTCTCTC TCCCCAGCT ATCTATATGG AATTGCTTAC CAAAGGATAG	300
TGCGATGTTT CAGGAGGCTG GAGGAAGGGG GGTTCAGTG GAGAGGGACA GCCCACTGAG	360
AAGTCAAACA TTTCAAAGTT TGGATTGTAT CAAGTGGCAT GTGCTGTGAC CATTTATAAT	420
GTTAGTAGAA ATTTTACAAT AGGTGCTTAT TCTCAAAGCA GGAATGGTG GCAGATTTTA	480
CAAAAGATGT ATCCTTCCAA TTTGGAATCT TCTCTTTGAC AATTCCTAGA TAAAAAGATG	540
GCCTTTGCTC GAG	553

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 843 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

GAATTCGGCC AGAGAGGCCT ACTTCTCTTA GTGATTTCAT GTTCAACCA GTACATTGTG	60
GTGAATACTG AAATATCTTG TTAAATTCAG ATAATTAAAA TGGTGGCAAA GGAAGCTGTT	120
TAGCCAGAGC CCTTCTTGAC TTTGAGGAAC AGTGGTAGTA TAAGACTTGA AGACAGACGT	180
GTAAAAAGTA CTACTCACTG GTAGGCTCAG GTCTGGTTGA TTGACTGATT CTGAGACGG	240
AATGTCGCTC TGTGCGCTAG GCAGGAGTGC AGTGGCCCAG TCTGGGCTCA CTGCAGCCTC	300
CGTCTCCGGG TCCAAGCGAT TCTCTGCCT CAGCCTCCCG AGTAGCTGGG ACTACAGGCG	360
CCCGCCACCA CACCGGGCTA ATTTTGTAT TTTTAGTAGA GACGGAGTTT CACAATATTG	420
GTCTCGAACT CCTGACCTCA GGTGATCCAC TCGCCTGGCC CACCCAAAGT GCTGGGATTA	480
CAGGGATGAG CCCCTGCGCC TGGCCTCGGT TGAATTATT AAACAACCTT TGTGGGCAGC	540
AAGCTGTACG AGGTAACTA TGTGATGAGA AGACTTAGAA ATGGAGAAAA GTTTTATCAG	600
TTCTACATAG GACTTAGTTT GGGAGTTTCT GGAAACTACG TTGGAAATCA GTAGTTGCAC	660
ACTAGCTGAA TTCAGCTGTG TAATTTACAG TGATTTGTGA TTTACCAAAT AAGTAGAAGA	720
GGGAATTAAG AAGCTAAAAT CTCTGGGTAC TTGTTTGATA TGAATTTGTT AATGTTTAT	780
ACTCAGGTAA TAAGTGTAC CTCAGTCATA GCATTTAATA TTTTATCTGA CTGTCCTCTC	840
GAG	843

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 525 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

```

GAATTCGGCC AAAGAGGCCT ACATCCAGAA ATTTAGGGAC TCAGCCCTGG TCAGGGTGGC      60
AAAGGGTCTG TTTGTCTTTC CCCATTAGAC AGAGGTCTTG TCCTGCTACC CTAATTGTAA      120
AGGGGTGCCT GGAAGGGGT GGTAGGGACA TGGTGGCGGT GGAGACTCCG GCCCCACTTC      180
TCCAGGCTTT GCTGACAGGG GCCTGCTTTT AATTTTAT TTTATTCCAT GACTTTTAA      240
AAAAGAATCC CGTAACTTCT TTTTCATAAC TTTTGTGTA ACTTTTCATA ATACTGTTT      300
CTACTTTGTT CCCACAAGTT TTTTGCCAC AACGTTTTTA CATTTTAT CCCATAACTT      360
TTTCACCCCA TAACTTTTTT AAATAAGTT ATTTAATAAA ATAACTTTTT ATAAAACTT      420
AATAAAAGTT TTTTAATTAA CCCATAACTT TTTATTTTG GTTTTAAATA AACACTTGCA      480
TAGTTATATT ACAACTTTGT AAAAATGAAA CACATTATCT CAGGC      525

```

(2) INFORMATION FOR SEQ ID NO:534:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

```

GAATTCGGCC AAAGAGGCCT AGAAAACCTT TGAAGACATG TTGAAAATAC ATACTCCTGT      60
TAGCCAAGAA GAAAGATTGA TTTCTTAGA CTCCATTAAG TCCAAATCCA AAGACTCTGT      120
GTGGGAAAAA GAAATAGAAA TACTTATAGA GGAAAATGAG GACCTCAAAC AACATGTAT      180
TCAGCTAAAT GAAGAGATTG AAAAGCAAAG GAACACTTTT TCATTGCTG AAAAAAACTT      240
TGAAGTTAAC TATCAAGAGT TACAAGAG      268

```

(2) INFORMATION FOR SEQ ID NO:535:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

```

GGCTTGCAAC TCGGCGATCC CCGACTCCCT TCTTTATGGC GTCGCTCCTG TGCTGTGGGC      60
CGAAGCTGGC CGCCTGCGGC ATCGTCCTCA GCGCCTGGGG AGTGATCATG TTGATAATGC      120
TCGGAATATT TTTCAATGTC CATTCCGCTG TGTGATGTA GGACGTTCCC TTCACGGAGA      180
AAGATTTTGA GAATGGCCCC CAGAACATAG ACATTCCTCT CGAG      224

```

(2) INFORMATION FOR SEQ ID NO:536:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

```

GAATTCGGCC TTCATGGCCT ACCACTCTGG CCCCAGCGTC ACTGGCCTAG GGACACATGG      60
GGGTGGGGAT TGTTGGCCT TCCTGGCTTA GGTCTCTGGA AGAGAGAAGA ACCCCATGGG      120

```

```

GCAGACCCAG GCCACGGGCA GTACATGCCT CCCACACTAC TGACACCGCC AGTGTCTTCT 180
GTGAAGCCAC CTTTGAGCAA CGGAAAGGAA GGGGGATGGG CAAGATCAGT GCAAGGTTGG 240
CCAAAAGCCT GGGGCTGGCC TTCTGCTGGC ATGAGAGGGC CAGGCCGCCC CCAGCTCCTC 300
GAG 303

```

(2) INFORMATION FOR SEQ ID NO:537:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 350 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

```

GAATTCGGCC TTCATGGCCT AGAACAAAAT CTGAAATTCA GAAATAAACA ACAGTTGGAA 60
AATATTTTCC ATTTTTCCTT CTATTAAATA TGATAATTTC AGGTGCAAAG AGTGTCTTCT 120
TTTTTTTTTT TTTCTCCACA GTGCTTTTCA CGGTGGGGAC TAATGGATAT AGAGGGTGGG 180
AGGCCAGAAT AACCAAGTAC CTGGAAGTGA ATCTTTGTGG AGATAATGAA ATAATTTTAT 240
TCGAAAGGTG CAAAAGGAAG TCTTCCATCA CTAGCTCAGC TGTTATGGTC CTTGAACTGC 300
CCTTGCCCGT CTGTCTTTTT ATTAATCCTT TTTACCTGTC GAGTCTCGAG 350

```

(2) INFORMATION FOR SEQ ID NO:538:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 344 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

```

GAATTCGGCC TTCATGGCCT AGAGTTGCAC AGATGTCTTT TGTTAGCTTT GGTGGCGGAG 60
TCATCCTCAC AGACCGTTAC TCAGATAATT AAGTGCCTTG CAAATTTAGT ATCAAATGCA 120
CCTTATGATC GTCTAAACT CAGCCTGCTG ACCAAAGTCT GGAACCAGAT AAAGCCTTAT 180
ATTGCCACA AAGATGTTAA TGTTCTGTG TCAAGTCTCA CACTCTGGG AGCTATAGTG 240
TCCACCCACG CACCTTACC TGAAGTCCAA CTAATTCTGC AACAGCCATG TTCTTCTGGA 300
CTCGGTAATA GCAATTCAGC AACCCCTCAC CTCAGCCCCT CGAG 344

```

(2) INFORMATION FOR SEQ ID NO:539:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 343 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

```

GAATTCGGCC TTCATGGCCT ACAACTCCAT TAAACCACCA CCAGCTCCCC AAGCCACCCC 60
TTCAGCCATG AAGTTCCTGC TCCTGGTCTT GGCAGCCCTC GGATTCCTGA CCCAGGTGAT 120
CCCAGCCAGT GCAGGTGGGT CAAATGTGT GAGTAACACC CCAGGATACT GCAGGACATG 180
TTGCCACTGG GGGAGACAG CATGTTCAT GTGCAACGCT TCCAGAAAAT GCTGCATCAG 240

```

CTACTCCTTC CTGCCGAAGC CTGACCTACC ACAGCTCATC GGTAACCACT GGCAATCAAG 300
GAGAAGAAAC ACACAAAGGA AAGACAAGAA GCAACCCCTC GAG 343

(2) INFORMATION FOR SEQ ID NO:540:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

GCGATTGAAT TCTGAAGACC TCTCAGCCTC TTATGACCAC TCCTGGCACC CTGTCAAGCA 60
CAGCATCTCT GGTCACTGGC CCTATAGCCG TACAGACTAC ACCTGGAAAA CAGCTCTCGC 120
TGACCCATCC TGAAATACTA GTTCCTCAAA TCTCAACAGA AGGTGGCATC AGCACAGAAA 180
GGAACCGAGT GATTGTGGAT GCTACCACTG GATTGATCCC TTTGACCAGT GTACCCACAA 240
ATCTCGAG 248

(2) INFORMATION FOR SEQ ID NO:541:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

GAATTGGCCT TCATGGCCTA GATTGTCTTT ATAGGAAATG TCTTTAGCAA AATACTACGG 60
GTTCTATAAA ACCCATTAAC GGGTTATCAG TGTCTAGGAC ATAAATGGCT TCTGGTAAGA 120
AAATTAAGGT CTA CTCTCTCC TAAATACTAT CATAATTACA AAGGTTAAGA AAAAAGAAGT 180
AGAGTAAAC ATGTGTCCCT TAAAAATCAA ACATGAGTGG TCACAAGGTC CTAAGAAGCA 240
GAGAATGAGA ACTCCAGTTG CTGTTTATC TCTCAGGCTG AGCATGGTTG GTTACAATGA 300
GGGGTAGCAG GAAGAGCACA GCCTTGGACT CCAGTCCAAG GAACTCCAGT CTCTCCTGCA 360
ATTTCCAGT GTTTGACCTT GGGCCACTTA CTGTTCTTT CTCAGCCTCC ATTTTCATAT 420
CTAAACCTC GAG 433

(2) INFORMATION FOR SEQ ID NO:542:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

GAATTCGGCC TTCATGGCCT AGACACGGGA CATAAAACT TTAAATGAAG GAGGACACAG 60
CTCAGAGCCC TTCCACATGC GGCCCAACCC TGCCCCACGG AGACCGGCCA TGGCAACCGC 120
TCAATCAGAA GGTGTTCTTG ATGCGGCCGG CCACCAGCCT AAGGATGTCC CCGATCTTCT 180
TCTGCCAGTT GCGCATGTCC TTGGACACGG CGCACCACAG CTCCCATGCG CGAGGCTCTG 240
CACTCTCACA GCGCTTCCTC ACCTCCTCCT GCTGCTCCTC AGTGCCATGC TGCAGCTCAA 300

ACTTGTAGAA GAAGGCCAG GCATCCCCA GGTCCGAGTC AATCTTCACA GTGCGGTGGA	360
ACCACTCCCT GGCCTTGGTG ATCTTCCGCT GACTCCAAAA CAGCTTGGCC ACGGCCAGGA	420
GCACATGGGG GTCATGCTCA CACTTCTTCA GGGCATCCAC GCTCTTGGTC CTCCTCTGGG	480
GCCTTGCTC GAG	493

(2) INFORMATION FOR SEQ ID NO:543:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

GAATTCGGCC TTCATGGCCT AGTCAGGGAG AAGGGAAGGT GAGAAGGGG GGAAAAAGA	60
AGCAAAAAGC CCAAGAAAA AAACATTTTA TATTCATCTG TATAAACATA TCCGCTAAGG	120
CAAACGCAAT CCGGGTCCGA GGCTGCTGCG CTGGGCTCGG TGCCTCCTAA TTTCTGCAGA	180
TTCTAAGGCC AAAAAATAAA ACCTCTGCAA GTCCGCGTAG CTTCAGGAC TCCTGGGCAT	240
TTTACTAAAA TAAAGAGTTA TCGAGTTTAA AAAGCAGTGA CGTCGTTATG ACACACACTG	300
AAAGTTGCAT AACTGTGGCC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:544:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

GAATTCGGCC AAAGAGGCCT AAGAATTCCT TATGAAAGTG ATGCTTGAGT CAAAATATGA	60
TGGATGAAGA GAGTTTAAAT AGATTACATA GAATTTTAA TAATGTCGAT TGGTTATATA	120
CTGGGCACTG ATAGCTGATT TTTCTTGGG GAAAGGTATG TCAGCCTAGT CATTAGATT	180
CCTTTATTTT TTAAATGTT TTTTCATTTT TTGCTTTGCA TTGCATTCAT TTGCTGAAGA	240
GCTGGCTTGT ACTTTGGCAG GTGTCATACT TGGTTATTCT CCTTAGGATA TTGGCCCAAC	300
AATCTGGGAT TTGTGAAAGG CGCTTCGCTT TTCAGACCTG GGCGTCTGTA TCATGACTAT	360
CATAAATTA GGATTAAGAC ACCTAGCCTC CTACCAGGAT GAATGAGGTG TCCATGTGAC	420
CTGCTGTGCC CTGGAATTTT ATACATCTT CTCTCATAGC ACACGGACTC GAG	473

(2) INFORMATION FOR SEQ ID NO:545:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 120 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

GAATTCGGCC AAAGAGGCCT AGTCGAGAAG GAAGAGGGAA GAAGAAAAAC TATAAAAGTG	60
TGCTAAATGT TTTATTTTCT CTGGAAGAAT AGTTATATTC TACTCTTTGT GGCTCTCGAG	120

(2) INFORMATION FOR SEQ ID NO:546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

```

GCTAGACCTG CCCCTTAGA AATGGAAAA GCATGCAAGA GAGATGTTAA AGGAGACTAT      60
TGGAGCAACT GTGTCCACAC CCTCTGTGAT AGAAATGGAA AAAATATCCC CAGAAGATCG      120
TGGTGAGAAT ATTGGGAAAC ACAAAGTGT ACCCGCAGTG GTAGACATTG AGAAAATACA      180
TGGAACAGGA CTAGAATTGA CCACTAAACA AGGGGAGGCC ATGCTTCCTG CATTTGAAAG      240
TAAACACCA CAAGAGTATG CTGAAGGGAG TGTGAAGAA ACAATGGAAA ATACTTACCA      300
AAAGGATGCT GAAGGGGATA TTGGAAGGC TGAAGTGATG CCTGTGAGGT TAGAAATGGA      360
AAATACTTAC CCAAAGGATA CTGAAAGAGA CGGTGGCAAA ACTGAGGTGA TGCCCTTGC      420
ATTAGAGGTA GTAAATACTT ACCAAAAAAA TGCCAAAGGT TTTACCGGA ACAATCTCGA      480
G

```

(2) INFORMATION FOR SEQ ID NO:547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

```

GAATTCGGCC AAAGAGGCCT AGAAACCTGA GGCTGCTGCC CTTTATCTGC CTTACCGSTA      60
CTGTCCCCTT CCCCAGCTC CTCCTGACC CCATGGGCCA GGCCTCAGAC CTTCCAGCTA      120
ACCGCTTCCC ATGAGCCACT ACTCTGATGT CAGCCTATAA CCAAAGGAGC TGGGGGTCC      180
AGGCCTGGTG ACCAACCTTT CTCAGCCAC TCAATCAGGG TGCTCCCCAC CTGCAGGCAG      240
GAGGCAACAC CCTATCTGCT ACCATCAGCC CTTCCAGAG CCCATCTGCC CCGCCAGCC      300
CTGCCCTGCC CAGCCATACC CTGCTCTGCC CCATCTGGGG GTGCCCTGCT CAGGGATGGG      360
CTGGCAGGGC TGTACCCAGC CTCCTGGTA AGCAAAGAGC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:548:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 142 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

```

GCGATTGAAT TCTAGACCTG CCTCCCTGCT TTCTAATAAA TCTGACTAAC CTTAGACATT      60
TTGTATCTTA CTAAGACAT CCCTTCAATA TCTACTTCAT TATCCCATGC CATTTCCTCA      120
CTGTCTCAAC ACGAATCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:549:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

```

GAATTCGGCC TTCATGGCCT ACTATGGTAT TGCTAAACAA GGGTGGGAGG AGAGAGAGGT      60
AATCAGGGGAG GACTTCCCAC AGGAGGTGGC ATCTGCAGAT GTCTCAAAAA AGAAAAGAAT      120
TAGCCTGGCA AGAGGTGAGG ATTGTGTAGA GGTCCTCAC TTTCTTGTG GGTGGAGGAA      180
ACCATTCAG GAGCTGTAGG AAGCTTGGTG CTGGTGAAGG AGGCAGGAGA GGAGAGAAGA      240
GGAGATGACC TTAGAAATCA CATCCAAGAG CCTCTGATCC CAGGAGGCAG CTCGAG      296

```

(2) INFORMATION FOR SEQ ID NO:550:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

```

GCAGGAGAGA AAATTGAGGC TTAGGTTAAG AAACCTACCC AAAGTCAAAC AATTTAATTG      60
GTTTGGGAAG ACCAGGAAGA CTTTAAGTTC CTAAGATCGT TTGAGATTCT GCATCAGGGA      120
ACACTTGACA GCAGGTTTAT ACAAGACAG ATTTGGTATC TTTGGAGGGA ATGAGTTTCC      180
AGTCATTGCA GGTGGTCCAG CAGAGAGGGC CACTCTCCTT TTTTCTTTC TTTACTCCCT      240
TTTTGATTCT CGAG      254

```

(2) INFORMATION FOR SEQ ID NO:551:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

```

AGGCCATGAA GGCCCTTCC ATTTCTTTT GTTCCATCAC TCTTCTCTCA ACCTGTGTTT      60
CTTTTATTAC TGAGGAGTTA GTCCCCATTA GTTCTGTAT CACATTTTCA TTGCACGAC      120
ATTACTCGCA GGTGGTGGG AGCCTGGGCT TTTGGGGAAC CAGGCTGCTC TGGTCCCCAG      180
CATTGCCTCC TCCTAGCCCC TCTAGTCCAG TTTGCCTCCC TTACCTCAT TTCCAAACC      240
TCTTGATACC TCCTCTCCT CCCCAGCTG GCCTCGAG      278

```

(2) INFORMATION FOR SEQ ID NO:552:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

```

GAATTCGGCC TTCATGGCCT ATGCACTTCT TCTTCTCTC CTCCTTTTGC TGGGTGCTTA      60
CCGAGGCGCTG GCAGTCCTAC CTGGCTGTCA TTGGGCGGAT GCGCACCCGC CTCGTTGCA      120
AGCGCTTCCT CTGCCTGGGC TGGGGTCTGC CTGCCCTGGT GGTGGCCGTG TCTGTGGCT      180
TTACCGAAC GAAAGGATAC GGTACATCCA GCTACTGCTG GCTCTCCCTG GAGGGCGGCC      240
TGCTTACGC CTTTGTGGGC CCTGCAGCCG TCATTGTCTT GGTGAACATG CTCATCGGAA      300
TCATCGTCTT CAGCAGCTCG AG                                         322

```

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

```

GCCAAATCA AGCAAAGTAT GAAGAAAGAT AAAGAAGGGG AAGAAAAAGG GAAGCGAAGA      60
GGATTCCCCA GCATCCTGGG ACCCCACGG AGACCAANCC GTCATGACAA CAGTGCAATT      120
GGCAGAGCCA TGGAACTACA GAAGGCGCGC CACCCTAAGC ACTTATCCAC ACCCTCATCT      180
GTGAGTCTCTG AACCTCAGGA CTCTGCCAAG TTGCGCCAGA GTGGGTTAGC AAATGAAGGA      240
ACAGACGCTG GATACCTGCC TGCCAATTCC ATGTCTTCTG TAGCTTCAGG GGCCTCTTTT      300
TCCCAGGAAG GAGGGAAAGA GAATGATACA GGATCAAANC AAGTTGGAGA AACATCAGCA      360
CCTGGAGACA CCTTAGATGT CACCCTCGAG                                         390

```

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

```

GACGGCTACA CCATGGGCGG GCTGCTGCGG GCCGCCCGGC TGCCGCCGCT GCTTTCGCCG      60
CTGCTGCTTC TGCTGGTTGG GGGAGCGTTC CTGGGTGCCT GTGTGGCTGG GTCTGATGAG      120
CCTGGCCCGAG AGGGCCTCAC CTCCACCTCC CTGCTAGACC TCCTGCTGCC CACTGGGCTTG      180
GAGCCACTGG ACTCAGAGGA GCCTAGTGAG ACCATGGGCC TGGGAGCTGG GCTGGGAGCC      240
CCTGGCTCAG GCTTCCCCAG CGAAGAGAAT GAAGAGTCTC GGATTCTGCA GCCACCACCA      300
CTCGAG                                         306

```

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

```

GAATTCGGCC TTCATGGCCT ACCCTCTCAC GCCACCCCGG CCCCCACCGG GCTGCAGGTG      60
CTGCTGATGC GCTGGGATCT GATTGAGGAT AAAAAGGAAG GAGAGATGAC CCCTACCCCC      120
TCATCCCCCA GTTTTGAAAA GGTCTAAGCA AGTGAGTCTG GTGGAGGAGC TGAGGGAGGG      180
AGCCATGGAA GGTGCCAGAA GGAAGGTTGG CCGGGGCACG TGTGGGCCGT GGCTTGGGCT      240
GGTCAGAGTG GCGTGAGCTG CCCGGCGCCT GCCCTGCCCA AGTGACCAGG GAAGTGTGTG      300
TGTGTCCATG TGTATGCGTG GCTCGAG      327

```

(2) INFORMATION FOR SEQ ID NO:556:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

```

GAATTCGGCC TTCATGGCCT AGAGAAGGAG CCAGCTGGGG CCGAATCCAT CCGCTTGAAC      60
ACCAAAGAAG ACAAAATGG TGTCCCGAC TTAGTGGCCC TGCTGGCTGT GAGAGACACC      120
CCGACGAGG AGCCGGTGGG CAGCGACACT TCGGAGAGCG ACTCGCAGGA AAGTGGGGAC      180
CAAGAAACAG AGGAGTTGGA TAATCCTGAG TTCGTGGCCA TTGTGGCCTA TACCAGCCCG      240
TCGGACCCCT GGGCCCGAA GGAGAACTCG AG      272

```

(2) INFORMATION FOR SEQ ID NO:557:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 280 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

```

GAATTCGGCC TTCATGGCCT ATTTCGATC TATGTATCTG TACTCATACA GCCTCATCGG      60
GCTAAACAGC CTTCTTTTCA GAACAGTAGA TCACTCAACT GGGTTTTCAG GTGACTGTTT      120
ACCTTTCAAG GCTGGCTTTA TAGGTCTTGC CTCACTGTAT CCAGCAATCC AAACTTTACC      180
CTATCCCACT CAGGACTGCA CACCTCATAT TGAAAGACAT ACCTTAGAAC CAGACTCCCC      240
AAACCTTACA AATATCCAC CTTGACTCC CGTTCTCGAG      280

```

(2) INFORMATION FOR SEQ ID NO:558:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 474 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

```

GCAATGGTCT CCAGGATGGT CTCTACCATG CTATCTGGCC TACTGTTTTG GCTGGCATCT      60

```

```

GGATGGACTC CAGCATTTC TTACAGCCCC CGGACCCCTG ACCGGGTCTC AGAAGCAGAT    120
ATCCAGAGGC TGCTTCATGG TGTTATGGAG CAATTGGGCA TTGCCAGGCC CCGAGTGGAA    180
TATCCAGCTC ACCAGGCCAT GAATCTTGTG GGCCCCCAGA GCATTGAAGG TGGAGCTCAT    240
GAAGGACTTC AGCATTGTTG TCCTTTTGGC AACATCCCCA ACATCGTGGC AGAGTTGACT    300
GGAGACAACA TTCCTAAGGA CTTTAGTGAG GATCAGGGGT ACCCAGACCC TCCAAATCCC    360
TGTCTGTGTG GAAAAACAGC AGATGATGGA TGTCTAGAAA ACACCCCTGA CACTGCAGAG    420
TTCAGTCGAG AGTTCCAGTT GCACCAGCAT CTCTTTGATC CGGAAACACT CGAG        474

```

(2) INFORMATION FOR SEQ ID NO:559:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

```

GAATTCGGCC TTCATGGCCT AATTTTTTTG TTGTTGTTTC CTTTTGTAT TTTACTGATA    60
TCACCAGGAT AGTTTACTCT CCTTCTAGCT TTCTGCTTAC CGCACACTGG ATAACACACA    120
CATACACACC CACAAAAATG CTCATGAACC CAATCCGGAG AAGGTTCCAG CAGGTCCCCC    180
ACCTCCTCCT CCTCCTCCTA CTTCTCCTCT TGACAGCGAG GACAGGAGGG GGACAAGGGG    240
ACACCTGGGC AGACCGCCG GCTCTCCCCC CACCCACCC CGTCTCTGAG                290

```

(2) INFORMATION FOR SEQ ID NO:560:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

```

GTGTATGTGG GGGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTGTGTGT    60
GTGCGCCTGC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA    120
GAAACATGGC GCATGTGAGC ATGCCACTTC TTGTGTGCCT GTGACTGTTC AGAATGTACA    180
CGGCCCTGCA GCTCCCGAAG GCCAGCTCTG CTGCAACCCC TCCTCTGTCC AACACAGTCC    240
TCACTGGTGT CTTTCTCTCT TCAAATCTAC AGCATTCTCT ATCTCTGCAA ACAATTTAAC    300
CCAAACCAA GTTCTGGCTG ACAAGGCTAC ATCTTGTTTC TTGTGCGTGA TTAGCCTCGA    360
G

```

(2) INFORMATION FOR SEQ ID NO:561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

```

GTTCTAGACC TGCTCGAGA TATGCCGGA GGTGTCATGG CTGGTCCCAG GGCCAGCACA    60

```

```

GGCCCGAGGC CGGGCTGCCT GGTTTTATTT TTATTAACT TTATTTTCTG TTTTATGAGT 120
GTGTGTCCGC CCACCCCCAC CCCCTTCAGT GTTAAGTGGG GAGCCCTGGG GGAGTCTCTC 180
CTGCCTCCCA GCCTCTCCCA AGACCTCCCC CCTCGTCACC AGCCATCCCT CTGGACCAGG 240
CAGAGGCGG ACCGGGTGGG CAGGGGCTG AGGGTGGCTC GGGCCAGCCC ACCAGCCAAT 300
GGACCCCTCC TCAGGCCGCC AGTGTGCCCC TGCCCTTTT TAAACAAAA TGCCCTCGTT 360
TGTAACCCCT TAACGCTCGA G 381

```

(2) INFORMATION FOR SEQ ID NO:562:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

```

GCACTCATAA AAATCTTACT CAGAAATCTT CAGAGGTTTG CTAAGGATAC AATTGATTG 60
TTACACATTT AATGCTCACC AGCTGCTTAG GCCACACCA TTTATCCACC CTGATTTGCT 120
ACTGCTCTTT GAAATACAAC CAGTGTTC A GCCAGACTGT TTTCTGCTT CTGCTCCCT 180
TCTCTCTCTC CCAGCACATC TGTGAATTCT TTGACTGGT TACCACTCCC AACTCTCTCC 240
CCAGCAATGC AGATCTTCTA CACCTTTAG GATCTAAGCT AAGTCTGCTT CCCAGATATC 300
CTCCGAACA GCTCGAG 317

```

(2) INFORMATION FOR SEQ ID NO:563:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 472 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

```

GAATTCGGGC TTCATGGCCT ACTTTAATGA GATAGGAACT AGTATATTCA CCGTCTATGA 60
GGCCGCCTCA CAGGAAGGCT GGGTGTTCCT CATGTACAGA GCAATTGACA GCTTTCCCG 120
TTGGCGTTCC TACTTCTATT TCATCACTCT CATTTTCTTC CTCGCCTGGC TTGTAAGAA 180
CGTGTATTATT GCTGTTATCA TTGAAACATT TGCAGAAATC AGAGTACAGT TTCAACAAAT 240
GTGGGGATCG AGAAGCAGCA CTACCTCAAC AGCCACCACC CAGATGTTTC ATGAAGATGC 300
TGCTGGAGGT TGGCAGCTGG TAGCTGTGGA TGTCAACAAG CCCAGGGAC GCGCCCCAGC 360
CTGCCTCCAG AAAATGATGC GGTATCCGT TTTCCACATG TTCATCTGTA GCATGGTGAC 420
CGTGGACGTG ATCGTGGCGG CTAGCAACTA CTACAAAGAA GAAACCTCG AG 472

```

(2) INFORMATION FOR SEQ ID NO:564:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 411 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

```

GCCGCGATGT TCCCCCTTCG GGCCTGTGG TTGGTCTGGG CGCTTCTAGG AGTGGCCGGA      60
TCATGCCCCG AGCCGTGCGC CTGCGTGGAC AAGTACGCTC ACCAGTTCGC GGACTGCGCT      120
TACAAAGAGT TGCCTGAGGT GCCGGAAGGA CTGCCTGCCA ACGTGACGAC GCTTAGTCTG      180
TCCGCGAACA AGATCACTGT GCTGCGGCGC GGGGCCTTCG CCGACGTCAC ACAGGTCACG      240
TCGCTGTGGC TGGCGCACAA TGAGGTGCGC ACCGTGGAGC CAGGCGCACT GGCCGTGCTG      300
AGTCAGCTCA AGAACCTCGA TCTGAGCCAC AACTTCATAT CCAGCTTTCC GTGGAGCGAC      360
CTGCGCAACC TGAGCGCGCT GCAGCTGCTC AAAATGAACC ACCACCTCGA G              411

```

(2) INFORMATION FOR SEQ ID NO:565:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 270 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

```

CACTCAGAAC CCTCAGACTT TCAAAGAGCC AGGAAATCGG TATAAAATTT TTGAGATAAC      60
ATTAATTAAG CTTTTGCAG TTTTCTCTAG GACCAGATTA AACAGAAGTT TTCCTTTACA      120
GTATTCATTA TGGTTGGTAT CTCCAGAGTT CATCCTTTTT TTGTGGTACT GGGAAAAGTT      180
GCAACATTTA CCTTTGCAGG GACATGGATG GAGCTGGAGG CCATTATCTT TAGCAAACCTA      240
ACACAGAGCC AAAGACAAA ACCACTCGAG                                270

```

(2) INFORMATION FOR SEQ ID NO:566:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

```

GTTCTGTGTT ACTAACGGCT CATCTTTTCC TTGTTTTTGT TTTTTTTTGG TTCTTTTTTT      60
CCATGTCACT AAAGGCCAAA ACTGGAACCA AGGATTTAAT AACTATTATG ATCAAGGATA      120
TGGAATTAC AATAGTGCCT ATGGTGGTGA TCAAACTAT AGTGGCTATG GCGGATATGA      180
TTATACTGGG TATAACTATG GGAACATATG ATATGGACAG GGATATGCAG ACTACAGTGG      240
CCAACAGAGC ACTTATGGCA AGGCATCTCG AG                                272

```

(2) INFORMATION FOR SEQ ID NO:567:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 306 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

```

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAAATC      60
AGAAGAGGTA GAACCGAGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT      120
GTCCTTCACA CTAGCTACAT GATTTATAGT CTTGCTCCCC AATATGTTAT GTATGGAAGC      180

```

CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCTT 240
TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG 300
CTCGAG 306

(2) INFORMATION FOR SEQ ID NO:568:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 253 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GGTGTTTGGC CACAGTTCGG GACCTATGGT AGAAAAATAC TCAGTAGCTA CCCAGATTGT 60
AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTCTGTTC CAGAAAGTTG GAAAACTTGC 120
AGCAACTGCA GTAGGTGGTG GCTTTCTTCT TCTTCAGATT GCTAGTCATA GTGGCTATGT 180
GCAGATTGAC TGGAAAGAGAG TTGAAAAAGA TGTAAATAAA GCAAAAAGAC AGATTAAGAA 240
ACGAGCTCTC GAG 253

(2) INFORMATION FOR SEQ ID NO:569:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 544 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

CACAGTGCTG GCTCACAACA AGATGCTCAA GGTGTCAGCC GTACTGTGTG TGTGTGCAGC 60
CGCTTGGTGC AGTCAGTCTC TCGCAGCTGC CGCGGCGGTG GCTGCAGCCG GGGGGCGGTC 120
GGACGGCGGT NATTTTCTGG ATGATAAACA ATGGCTCACC ACAATCTCTC AGTATGACAA 180
GGAAGTCGGA CAGTGGAAACA AATTCCGAGA CGATGATTAT TTCCGCACTT GGAGTCCAGG 240
AAAACCCCTT GATCAGGCTT TAGATCCAGC TAAGGATCCA TGCTTAAAGA TGAATGTAG 300
TCGCCATAAA GTATGCATTG CTCGAAGATC TCAGACTGCA GTCTGCATTA GTCACCGGAG 360
GCTTACACAC AGGATGAAAG AAGCAGGAGT AGACCATAGG CAGTGGAGGG GTCCCATATT 420
ATCCACCTGC AAGCAGTGCC CAGTGGTCTA TCCAGCCCT GTTTGTGGTT CAGATGGTCA 480
TACCTACTCT TTTCAGTGCA AACTAGAATA TCAGGCATGT GTCTTAGGAA AACAGAATCT 540
CGAG 544

(2) INFORMATION FOR SEQ ID NO:570:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

GAATTCGGCC TCATGGCCTA CATTAAAGAA AAGCTTCCCA CACATCCATT TGAAGCTGAT 60
CTCCTTGAGA TGGCAGAAAT GATTGCAGAA GATGAAGAGA AGAAGACTCT ATCTCAGGGA 120

GAGTCCCAAA CTCTGAACA CGAACTCTTT CTAGACACCA AGATATTTGA AAAAGACCAA 180
 GGAAGTACAT ACAGTGGTGA TCTTGAATCA GAGGCAGTAT CTAATCCACA TAGCTGGGAG 240
 GAAGAGCTGA ATCACTATGC CTTAAAGTCA AATGCTGTGC AAGAGGCTGA TTCAGAATTG 300
 AAGCAGTTCT CAAAAGGGGA AACCTCGAG . 330

(2) INFORMATION FOR SEQ ID NO:571:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 312 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

GAATTCGGCC TTCATGGCCT AAGGGAAAAC ATTTTGCATG TGTAAGCTT CATGAAGTTC 60
 TCTTTAAAAA ATACCAAAGC TTGTTTATTT CTGATAATTA ACCTAAGCCC TTATGAAAAAT 120
 AAACAAAATG AAGGGATTAT GACAGGTATT ACCAAAAACA CCAAAAGGAA CAAAGGGGCC 180
 TCGGTAAAAA CCTAATTGCT AATGCTTCAC AACTAGGAGA GCATGCCGTC TTGATGTTTA 240
 AAAAACCCAG GGTCTCCACC CTTCTTTGA TTTGTGCAAT TCTGTCTTC ACAGTCCGG 300
 AGCTTACTCG AG 312

(2) INFORMATION FOR SEQ ID NO:572:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 391 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

GAAAATGTTT ATGGCCGCG CAGGAGTAGA GGTCTGAGC CTCCTATTTT TCTGCATCTA 60
 CTGGGGTCAA TATGCCACCG ATGGCATGG CAACGAGAGT GTGAAGATCT TGGCCAAGCT 120
 GCTCTTCTCC TCCAGCTTCC TCATCTTCCT GCTGATGCTT ATCCTCCTGG GGAAGGGATT 180
 CACGGTGACA CGGGGGCGCA TCAGCCACGC GGGCTCCGTG AAGTTGTCTG TCTACATGAC 240
 CCTGTACAG CTCACCCATG TGGTGTGCT CATCTACGAG GCGGAATTCT TTGACCCAGG 300
 CCAGGTACTG TACACGTATG AGTCGCCGCG CGGCTACGGG CTCATTGGAC TGCAGGTGGC 360
 GGCCTACGTG TGGTTCTGCT ATGCTCTCGA G 391

(2) INFORMATION FOR SEQ ID NO:573:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 377 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

GAATTCGGCT TCATGGCCTA AAAAAAATC CAGAAAAAAA CAACAGCGCG GTGGTGGGGT 60
 TTTGTTAATT TCGCCTTTT TTTTITTTGC ACGCGCCACG AAATTCAGGC TCGGTTTAGC 120
 TCCTGAGAAA TATCCAAAGT AATTGCAGAT TCGGAGACG CACAGCATTG GTTCAAAAAA 180

GACCCGAGGC ATTGGGGCAG GGTTAGGTGG AGGGCACCGG AGGCTCTACA CAAGAAAAGC	240
AGGAACCTGC AAACCCACGT AGATTTCAC TACAACCTTC CCTTTCTTC TGGCTAGCCA	300
TCCAGCGCTC TCCATGGCAC TGCATGGCAC AAGTTGCTTC TGATAGTCTT TTAAGTTTGC	360
TAAGGGAACCT CCTCGAG	377

(2) INFORMATION FOR SEQ ID NO:574:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

GAATTCGGCC TTCATGGCCT ACAGCCTCAA GTCACCTCCA AGCCCCCTCC TTGTCTGTGC	60
ATCCGGGGGC AGCTCTGGAG GGGGTTTGCT GGGGAACTGG CGCCATCGCC GGGACTCCAG	120
AACCGCAGAA GCCTCCCCAG CTCACCCCTG GAGGACGGCC GGCTCTCTAT AGCACCAGGG	180
CTCACGTGGG AACCCCCCTC CCACCCCTGC GAGTCTGTTT CCAAGGAGGA GAAGGAGCAG	240
AACTATGACT TAACTGAAGT CTCAGAGAGC ATGAAAGCTT TCATATCCAA AGTCTCAACC	300
CACAAGGGAG CAGAGCTGCC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

GAATTCGGCC TTCATGGCCT ACTCAGCCTC CCTAATAGCT GGGATTACAA GCGTGAGCCA	60
CCACACCCCG CTGGGAAATA TCTTAAAGA ATCAAAATAA GAAAGTTACT CTACTTAAAT	120
CGTGTGCTTT TTCTGTGTGT GATTTATGGT AATCTTACCA TGGGGTATCT GATTACTTTA	180
GAAAGATCCA TTTAGCITTAT TTTTTCCTC TTTGGGTAT TTTTTCCTC CTTCATTTG	240
CACAGCCTCC CCCCAAATAA AAAATAAAGA TATAAAGTCT ATCTTCTCCC TCTTGTCAGT	300
TTAAGTAAAA AGAAGTTTGT CTTCATTTT AATAATAGAA TTTGTGTGTA TATAATATAG	360
GCAGTGATTT GGCCTCAAGC TGAGTTTAGA TTTGAAAAGA TGAGAATATT AAAGCTTGTC	420
AGCCAGCCCA CTCTCGAG	438

(2) INFORMATION FOR SEQ ID NO:576:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

GAATTCGGCC TTCATGGCCT ACTGTNTTCC ATAAAGGCTG TACTAATTC CATTCTCACC	60
AACAGTTCAC TAGGGTTCCC TTTTCTCCAC ATTGTTGCCA ACATTCTTTA TCTTGTGTTT	120

```

NTTAATAACA GCTATCCTAA CAGGTATGAG GTGATCTCTC TCATTGCGGT TTTGATTGTC 180
ATTTCCCTAA CGGTTGGTGA TACTGAGCAT TTTTGCATAC ACCGGGTCAT TTGTTCTTTG 240
TTGTTGACTT GAGTCCCTTA TATAGTTTGG ATACTGCTGT GGCCTGAATG TTGTGTCCC 300
CCAAAAATTC GTATATTGAA CTCTCATCCC TAAGGTCAAC AGTTTAGGGA AGCGATTAGG 360
TCCTGAGGAC TCTGCCCTCT TGCATAGAAT TAGTGCTCTT ATAAAAGATG CCCGAGGGAG 420
CTCTTTTGCC CCTCCTGCCA TGTGAGGACA CAGCTAGAAG CTACCATCTG TGAACCAGGA 480
AGCCCCCTC ACCAGACACT GTATCTCGAG 510

```

(2) INFORMATION FOR SEQ ID NO:577:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```

GAATTCGGCC TTCATGGCCT AAAAAATAAA AATAAAATAT ACAACCAAAG GCAGTATTCA 60
CAGAGGTATT TCTTGGGAAT AAAAGAAGGA ATATAGTCAT TCCTTGGTAT TCTCTTTGGT 120
GTCCAGAGTT ACTTAAAAAT TCTTGGTGTT TATTGCCTTT TAGTCACAGG GATACACCTT 180
TTATTCAATTT ATTTATTTAT TTACCACTCT CATTTAGCAG TAGGAATGCA TCTTAGCATT 240
TTTATACTGC TGCTCAACAC AGTGCTTTCA CTCGAG 276

```

(2) INFORMATION FOR SEQ ID NO:578:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

```

GAATTCGGCC TTCATGGCCT AAATCCTTCC AGATGTCCTG TGAAAATGTT TGAATGCTAC 60
TTGTCTAAAA GTCCACAGAA TCTTAATCAG AGGATGGATG TTTTATTATT GCAACCAGAA 120
TGCTCTAGTT CTACAGATAG CCCTGTCTGG TATACGTCTA CTTCACTGGA CCGAAACACC 180
TTGGAAAATA TGCTTGTACG GGTCTTCTTA GTAAAAGATA TTTATGATAA AGACAATTAT 240
GAACTGGAGG AAGACACTCG AG 262

```

(2) INFORMATION FOR SEQ ID NO:579:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

```

GAATTCGGCC TTCATGGCCT AATTTAGGAC CATTTAAGAG AGTTTGACTA AGAAAGAGCT 60
GTTTGAAACC TCCTGGCTTA TGTATTTTGA GGGGTGTGGT GATCGAGGCT TTCTCCTCTG 120
AGTAGAGTTT GTGCATTGTC AGTATAAGAT TATCATTATC AAACATTCTT ACTAGGCCTT 180

```


TCTCCTCAGC	CCCTAAAAAA	ATATGTATAG	TAATGAAGTA	GGAAGATCAT	GTTTATATTT	240
GACTTCACAA	ATTCTCAGG	CTAAGTTGCT	TTCTACTGGG	GTGTGGCTGG	AGACAAAAAT	300
TACAGGTAAG	ACTTGACTTA	ATTTTGTATA	GGGAGGTTCT	TAAGAGGCTT	TTTCGGAATC	360
ACTCACCTCG	CCCCTTCCA	TGCAGGGATG	TGGTGAGAGC	CCTTCAGTCT	ACTTAGGAAA	420
ACCTGGCACA	TGACTCGAG					439

(2) INFORMATION FOR SEQ ID NO:580:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 346 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

GAATTCGGCC	TTCATGGCCT	AGATATTCTC	AGGGTCATCA	AGACTCCTGA	GATAGCAAAC	60
TTGGCCTTGC	TTGGCTTTGG	AGATATCTTT	GCCCTGCTGT	TTGACAACCG	CTACCTGTAC	120
ATCATGGACT	TGCGGACAGA	GAGCCTGATT	AGTCGCTGGC	CTCTGCCAGA	GTACAGGAAA	180
TCAAAGAGAG	GCTCAAGCTT	CCTGGCAGGC	GAAGCATCCT	GGCTGAATGG	ACTGGATGGG	240
CACAATGACA	CGGGCTTGGT	CTTTGCCACC	AGCATGCCTG	ACCACAGTAT	TCACCTGGTG	300
TTGTGGAAGG	AGCACGGCTG	ACACCATGAG	CCACCAGCCG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:581:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 740 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGATTGCC	ATCTTGTTTT	TGGTGGGTTT	60
CGGCCGACTT	CTTTGCCACT	TGCTATTTTA	TTTTCTAGGT	CTTGTGCCCC	CGTATTGTGT	120
GCTGAACTCC	NGTCTCATCC	TGTGACTAAG	ATTGCCCTAAC	CTCCTGGGAA	TGCAGCCCAG	180
TAGATCTCAG	CCTTACTTTA	CCTAACCCTT	TTTCAAGATG	GAGTCACTCT	GGTTCAAACA	240
CCTCTGACAT	TCGCAGTGGA	ATCCATTAAA	AGATGTTAAG	GAGATATGAT	TATATTTCTA	300
AATTGTCACT	CCAGCATCCC	CTACGCCAGA	CATTATGCCA	GTCTCTATCC	ATACAGTATC	360
TCATTTAATC	CTCCCGTCAT	TAATCTCATT	TTACCAATGA	GTAAACTTGA	AGCAAATGAG	420
TGACTTTCTC	AAGGCTACCT	ACTTACGCCT	TACCAGGGCC	AGGATTCAAA	CCTAGACTTG	480
TTCAGCGACA	GAACACACAC	TTAACCATCA	CCCACTTAGG	CCATGAAGGC	CGGCCTTCAT	540
GGCCTAAACT	GCTGTTATTT	TGGATTATAT	GGAGTTATGA	AAATCTAAAT	GTTTTACAAA	600
GTAAAAAAGT	ATTCTTTTTT	TGCTCACTTA	TAACTCAAAA	ATCACTAAAG	TCATTCTGCT	660
AAACATGCCA	CGAAGCCAAG	CTTCTTGCCA	TATGTCTGCA	TAATTTTATT	AAATCACTGC	720
TATTGACGTG	CAACCTCGAG					740

(2) INFORMATION FOR SEQ ID NO:582:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 491 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

```

GAATTCGGCT TTCATGGCCT ACAAAGGGGT AGCAAGGCAT GTCTTACATG GTGGCAGCAG      60
AGAGAGAGAG CAGGGAAAAC TGTCATTTAT AAAACCATCA GATCAGTTGG GTTGTGCAAA      120
TGGTGGAGAA GAAACTTCA GGAAGAGTGC ATAGACTGAG CAGAGAAGAG GACCAGCTAC      180
CTCCGTAGAG GCAGGGAGAG CAGCCAAGCT GGAGCCTGAG CAGCATTGCT GGACATGGAG      240
AAGGTCTGGA ATCTTGTCAG GGAAGCAAGC AAAGGGTTTC TTTCTATTCA ATGAAGTCCA      300
CTCCAGGAC CCTGGGCAGC AACGGGTGCT GGACTGGGCC ACCTGGCAGC GTCACATCAA      360
CTGGCAGCTA GAAGTCCTGG AGAATGACAA CTCCAGGAC GACCCCATG TGGGACTCCC      420
TCAGCTCAGC AAGAGACTGC CACAGTTCGA TGATGATGCA GACCCAGAC AGTAAAAGAA      480
GAAACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:583:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 566 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

```

GAATTCGGCC AAAGAGGCCT AAACAGTCCA GAGAGGCATA AATCAGACCC AGTTCCTAGC      60
TGGCTTGTC TTATCAAGTA AATGGAAAAG GGGCCAGGCC AAAGCAGGGC AAGATGACCT      120
TGGACTTGGG AGAGACTTGG ACTCATGCCA CAATCCTAGG GTGCCCCTG GACCATTGCT      180
TTTCTGAGTT TTGTAGTCAT TCGGTGTCG AAGTAAGGTA GATTGAAGTG AGGCCTTCGG      240
TTTCCATCTG GACCCTTTCT CTCCTGTTTT CTTTTTTTCC GCCTTGTCCT AGGGATGTTT      300
AATAGCCCAG AAATGCAAGC CCTCCTCCAG CAGATCTCTG AGAACCCCA GCTGATGCAG      360
AATGTGATCT CAGCACCCTA CATGCGCAGC ATGATGCAGA CGCTTGCCCA GAACCCCGAC      420
TTTGCTGCTC AGATGATGGT GAATGTGCCG CTCTTCGCGG GGAACCCCA ACTGCAGGAG      480
CAGATCCGCC TGCAGCTCCC AGTCTTCTG CAGCAGATGC AGAACCCAGA GTCACCTCTC      540
ATCCTTACCA ATCCCATAC CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

```

GAATTCGGCC TTCATGGCCT AGTTGAAAAT GATCATTACA CAATATATTC CTAAACATAA      60
ACTGAGTAAA CTTGAAACAG CTCACTGTGT GGAGAGGACC ATTCCCGTTT TGCTCACCAG      120
AACTGGAGAT TCTTCTGCCC GCCTCCGCGT CACAGCTGCA AATTTTATTC AGGAAATGGC      180
CTTGTTTAAA GAAGTTAAGT CTCTCCAAAT TATTCCATCC TACCTGGTGC AGCCATTGAA      240
AGCAAACTCT TCAGTTCACC TGGCAATGAG TCAGATGGGC CTCCTGGCCC GGTGCTGTA      300
AGACCTGGGC ACTGGCAGCT CGGGCTTCAC CATTGACAAC GTGATGAAGT TTTCAGTGAG      360
TGCCCTGGAG CATAGAGTGT ATGAGGTCG CGAGACGGCG GTTCGAATTA TTTTGGACAT      420
GTACAGACAG CACCAGGCTT CCATCCTGGA GTACCTTCCT CCAGACGACA GCTAATCTCG      480
AG

```

(2) INFORMATION FOR SEQ ID NO:585:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

GAATTCGGCC AAAGAGGCCT AATAAAGGTG TGGAACTTC ATTCATTCAT ATCTTCAACA	60
CAAATTGTAG GTAGCCTGTT TTTTAAACA TTTATTCAAC AAATATTTAG TCCAAGCCAC	120
TATTACTTAC TACCTTCTCT ACTATTGTAT GGACTTTTAA CTATCTCTGA CACTATTAC	180
TATTCTTCCA CATTCTCTAT TATTATACC TATGGTAAAA TTTGCCAGTT TGACCATACA	240
ACTAATACTC ACAGGGACAC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:586:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 120 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

GAATTCGGCC AAAGAGGCCT ACTCGAGTTT GGTGCTTTAT TTAGCAAGTG AGTAAAAATA	60
TTGGAATATT TAAGTATTTG CATAAAAAAT CAAATGGTAG TGTTTTGTAA TCTCTACTGT	120

(2) INFORMATION FOR SEQ ID NO:587:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 503 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

GAATTCGGCC AAAGAGGCCT ACTCGAGTCA GGTCTAGAAT TCAATCGACG GTTTAGGAAA	60
AAGACAATTT AAGAGAAGAA CTAAAGAAAA GAACAGAAAC TGAGAAGCAG CATATGAACA	120
CAATTAAACA GTTAGAATCA AGAATAGAAG AACTTAATAA AGAAGTTAAA GCTTCCAGAG	180
ATCAACTAAT AGCTCAAGAC GTTACAGCTA AAAATGCAGT TCAGCAGTTA CACAAAGAGA	240
TGGCCCAACG GATGGAACAG GCCAACAAGA AATGTGAAGA GGCACGCCAA GAAAAAGAAG	300
CAATGGTAAT GAAATATGTA AGAGGTGAGA AGGAATCTTT AGATCTTCGA AAGGAAAAAG	360
AGACACTTGA GAAAAAATT AGAGATGCAA ATAAGGAACT TGAGAAAAAC ACTAACAAAA	420
TTAAGCAGCT TTCTCAGGAG AAAGGACGGT TGCACCAGCT GTATGAACT AAGGAAGGCG	480
AAACGACTAG ACTCACTCTC GAG	503

(2) INFORMATION FOR SEQ ID NO:588:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 567 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

```

GCCACTATGG TACCAAAACC TCAGTCTTCA CATAGTCAAA CTTGGACACA AACAGCACCT    60
CCCACAAACA TTCTTATCCT CATCCCAGCA TTGGTTACTG ACCACACACT CTAGCAGGTC    120
ACTCAAGCGC TAATGCTGGG AAGGACCTCT GAATACTTCT CTTTGTCTTG TGCCACACAG    180
CCAGGGTCAC CAAAGCCTGT TAATGCTACC TCCAAAAAAG GCAAATCTGA CCCCTCTTCC    240
TCAAAACCCA GCCACATAGT AAGTTCAAGG ATTCAGTCAC AGGTCTGCCT TAGTGCACTA    300
GCCCTATAAC AGTAACTAT TCACTTCCCC TCCAGTCCCT TGCCCCCTTT CAAGCAATTT    360
CCTGTACTGC CAAGGGAATT ACTTTTCTAA AATTAGCTAA GAAACTTTTG ATGGTATCTT    420
ACTGTCCCAA AAATAAATTT TAATTCCTTC TTTAGCATGG TATAAAAAGG ACACAACAGA    480
GTTTGGTCTA GTGTCCTTTT AAAGACACTA GATTTCTCAT CACCATACCG CATGTACCCT    540
ATACGACTTA TCAATTCCTT ACTCGAG                                     567

```

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 138 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

```

GAATTCGGCC AAAGAGGCCT AGGCATGGTG AGTTTTGATC TTCTTCCCTC TCCTTTCTTC    60
CCCTTCTTCT TCCTTCTTT GATCTTCTTC CCCTTCTTTT CTCTCCCTTC CCCTTCTTTT    120
CAATTTCTCC CACGTCAA                                     138

```

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 420 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

```

GAATTCGGCC AAAGAGGCCT AGAGAGAATG GAAAAGATAA GGAACAGAAA CAAACAAATA    60
CCGATAAAGA AAAAAATAAA AGAGAAAGGG AGCTTCTCTG ACACAGGCTT GGGTGATGGA    120
AAAATGAAAT CTGATTCTTT TGCTCCCAA ACTGATCTG AGAAGCCTTT TCGGGGCAGT    180
CAGTCTCCCA AAAGGTATAA GCTCCGAGAT GACTTTGAGA AGAAGATGGC TGACTTCCAC    240
AAGGAGGAGA TGGATGATCA AGATAAGGAC AAAGCTAAGG GAAGAAAGGA ATCTGAGTTT    300
GATGATGAAC CCAAATTTAT GTCTAAAGTC ATAGGTGCAA ACAAAAACCA GGAGGAGGAG    360
AAGTCAGGCA AATGGGAGGG CCTGGTATAT GCACCTCCAG GAAAGGAAAA ACCGAGGCAG    420

```

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 611 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

```

GAATTCGGCC AAAGAGGCCT ACATTGCTTT TCAAATAACT TAAAATAACA CGTTATGTGC      60
CATGTGGCTA CTTTAGTAAT ATTGCCAAGA AGAGCACAGT TTTTACACTA GTGGCATCTC      120
AGTGAAATTA ACCAAAGATG AAGCTTTGGC TTTGCTGGTG AGATCAGAGC CCTCCTGAGC      180
AGGCAGCGCC ACTCCAGGT TCAGACAGG CTGCACAGG GGCAGAGATA CAGGGTCTGA      240
GGGCTGAGAC GCCATGGGGC CGCTGCTGCT TATGTGGTTG GATTGTTTAC AAGCCTCATT      300
ATTAAACTG AAGGCATTTT TTTTCTCTG CTGCCTTTCC CAAAGTGGTT AGGTTTGGAA      360
AAGAGATGAT GATGGTAATA TTTATTTGTG CTTTAAAGC CATTTCCCA AATGGGACTA      420
GCATGCTTGT TTTAGTATA CCGTGGCCTG CCTCATGATG GTTTGGAGAT ACTGCTCTGTG      480
GATGTGAGGT GGGGACTTCA TTCATTGTCC TATTCTATC TNCACCTTGT GCCTGGAGAG      540
CTTTCAGGGG AGGTGGAGGA GGAGGCTCTG CCAAGCTACT GCAACATCTG TCACCCACTA      600
NACCCAGACC T                                     611

```

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 443 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

```

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TGAAACCTGT CCCTCCTAGG      60
AAATTGAATA GCTTGAGTTA CGAAGGAACT GCATGGGACA GACTGAGTTT TGTTCCTCTC      120
TTCCCTGGAA GCTGGATGTC CTTTACAGCT TTGCCAGTA TGTCTGTGG CCCCTGAAGT      180
ACATAATCCA GAGTGGACTG CCTTTCAGGG TCCCTCAGCT GTGAAAGTGG AGCATTCTA      240
TCAAGACTAC ATCTTTCCTG TTCAGCTTTC TTCAGCCTTG GAGGAACCAC ACACAATGGA      300
TCCAAGACTT CTGTCCCTTG CTAATTATCT ATAAGAAGTA AACCCATTTC ACATACTTG      360
TGAATATGTT TTCTTCACT GGATTTTGGC AATAGGTAC CCAGTGCATG GTGGACCTAC      420
ACAGTTAGGC CTCTTTGGCC GAA                                     443

```

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 441 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

```

GAATTCGGCC AAAGAGGCCT AAAAGCATTC AGTATTGGTA AAATGAGTAC AGCTAANCGA      60
ACTTTAAGTN AAAAGGAGCA GGAAGAATTA AAGAAAAAGG AGGATGAAAA GGCAGCTGCT      120
GAGATTTATG AGGAGTTTCT TGCTGCTTTT GAAGGAAGTG ATGGTAATAA AGTGAAAACA      180
TTTGTGCGAG GGGGTGTTGT TAATGCAGCT AAAGAAGAAC ATGAAACAGA TGAAAAAAGA      240
GGTAAATCT ATAAGCCATC TTCAAGATTT GCAGATCAAA AAAATCCTCC AAATCAGTCT      300
TCCAATGAAA GACCACCATC TCTTCTGTG ATAGAAACCA AAAACCTCC ACTTAAAAAA      360
GGAGAGAAAG AAAAGAAAAA AAGCAATTG GAACTCTTCA AAGAAGAATT AAAGCAAATT      420
CAAGAGGAAC GTCGACTCGA G                                     441

```

(2) INFORMATION FOR SEQ ID NO:594:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

```

GAATTCGGCC AAAGAGGCCT AAGAAAACCT AGCTAATAAA GAAAAAGCTG TTGCTCAAAT      60
GAAGATAATG ATCTCAGAGT GTGAATCATC TGTGAACCAG CTGAAAGAAA CATTGGTTAA      120
TCGAGATCGT GAGATAAACA GCCTCCGGCG CCAGCTTGAT GCAGCTCACA AAGAACTCGA      180
TGAAGTAGGA AGATCTAGAG AAATCGCTTT TAAGGAAAAC AGAAGACTGC AAGATGACCT      240
GGCTACAATG GCAAGAGAAA ATCAAGAAAT CTCATTGGAA TTGGAAGCAG CAGTGCAAGA      300
AAAAGAAGAA ATGAAGAGCA GAGTTCATAA ATACATAACA GAGGTGTCAC GATGGGAGAG      360
CTTAATGGCT GCCAAGGAAA AAGAAAATCA AGATTTGTTA GATAGATTTC AGATGCTTCA      420
TAACCGTGCT GAAGACTGGG AGGTCAAAGC CCATCAAGCT GAGGGAGAAA GCAGCTCAGT      480
TCGACTGGAA CTTCTTTCTA TTGACACTGA GAGGAGACAT CTTCCGGAAA GAGTGGAGCT      540
ATTAGAAAAA GAAAATCTCG AG                                         562

```

(2) INFORMATION FOR SEQ ID NO:595:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

```

GGAAGAGCAG AATTTGGTGG CTTATCCTCA TGATGGAAAA ATCTTTTTCT GCACCTCACA      60
AGATATCCCT CCTGAAAATG AACTGCTTTT TTATTATAGC CGAGATTATG CTCAACAGAT      120
TGGTGTTCCT GAACACCCAG ATGTGCATCT CTGTAAGTGT GGCAAGGAGT GCAATTCTTA      180
CACAGAGTTC AAAGCCCATC TGACCAGCCA CATCCATAAC CATCTTCTTA CCCAGGGACA      240
TAGCGGCAGC CATGGGCCAA GTCACAGCAA AGAAAGGAAG TGGAGTGCT CAATGTGCCC      300
CCAAGCTTTT ATCTCTCCTT CCAAACCTTA TGTCCACTTT ATGGGTCACA TGGGTATGAA      360
GCCCCACAAG TGTGATTCTT GTAGCAAGGC TTTTAGTGAT CCCAGCAACC TGCGAACCCA      420
CTCGAG                                         426

```

(2) INFORMATION FOR SEQ ID NO:596:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

```

GAAAAATCAG TCGACTGAAT GACACCATCA AATCTTTGAA ACAACAGAAG AAACAAGTGG      60
AACATCAGCT GGAAGAAGAA AAGAAAGCAA ACAATGAGAA ACAGAAAGCT GAAAGGGAGC      120
TAGAGGGTCA AATCCAGAGA TTGAACACAG AGAAAAAGAA ACTAAATACG GACCTGTATC      180

```

ACATGAAACA TTCTCTCAGA TACTTTGAAG AAGAGTCCAA GGATCTGGCC GGCCGCCTGC 240
 AACGTTTCATC GCAGCGTATA GGAGAGTTAG AGTGGTCTCT CTGTGCTGTC GCCGCCACAC 300
 AGAAGAAGAA GCCGGATGGG TTCTCGAG 328

(2) INFORMATION FOR SEQ ID NO:597:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

GAGAAGTGCG AGAGGGGCCA GTGTTGTTGT TACCTGAAAG GTAAGTGCG CCCACAAAAA 60
 TGCAGTGAAG AAGAAGATAT ATGCATATGT TTAAGTTAAT ACAATTGAGA TACATTTAGC 120
 AGACAGAATC AATAGAGTTG ATGAGTGAAT GACTGGATGT GTGGGGAGTT TATATCACTC 180
 CCAGGTTTTT GACTTGGGCC ACCGGGCACT CAAGAAGGAA AAAGAGGATC CAGGGAGAGG 240
 AACTTTTCTG AGGACTGGGG TAGGGCTGAA CAGCTGCATT CGAGACTGGT GGAGGGTGGG 300
 CTGGGCATGG GATGCACAAA TGGAAATTCC ACTGGGTCTG CAGCTCACAC ATAGGCATGA 360
 CCAGCATAGA GATAGAGAGG CCCAGTGCT GCTGAGTAAC TGTGATTCCC CAGGTGATGG 420
 CATCAGCTGA GAAGGGAAGG AAGCCCATGT GAGGACACTG AAGAAGGAGT GAGCAGACAA 480
 TAAGAAGCCC ACAGAAGACA GAGAAGGAAC AACTAGAAGG AGGCTCGAG 529

(2) INFORMATION FOR SEQ ID NO:598:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

GAAAAAGATG AAATCTGATG GATTAGGAGC ATCTGGACAT TCGTCAAGTA CCAATAGAAA 60
 TAGTATAAAT AAAACTCTGA AGCAAGATGA TGTAAGGAA AAAGATGGTA CAAAAATAGC 120
 ATCTAAGATT ACAAAGAAC TTAATACTGG GGGAAAAAAT GTTCTGGAA AGCCCAAAAC 180
 TGTAACAAA TCCAAACAG AAAATGGTGA TAAGGCACGG TTGGAAAACA TGTCACCTAG 240
 ACAAGTTGTA GAAAGATCAG CAACAGCAGC AGCAGCAGCA ACTGGACAGA AGAATTTACT 300
 AAATGGAAAA GGAGTGAGAA ATCAGGAAGG GCAAATTTCA GGTGCCAGAC CCAAGGTACT 360
 CACAGGAAAC TTAATGTGC AAGCCAAAGC AAAGCCTTG AAGAAAGCTA CAGGGAAGGA 420
 TTCACCATGC CTCAGCATCG CAGAACCCT CGAG 454

(2) INFORMATION FOR SEQ ID NO:599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

```

GAATTCGGCC TTCATGGCCT AGGTCCTCAA GCATTGCTTC AATATCAATA TCGTCTGCCA      60
TTTTCTCTAA ACGCCTGTTC CGGCCTTCGG GCGCCTGTGG TGCTCGTGTT CGGGAAGAGA      120
TTGCTGCTGC TGCTGCTGCT GCTGCCGCCG CCGCCGCTTC TGTGCTACT GTTAAGCCCC      180
TAGGCCCAGG CCGCGGAACC GCCCAGCCCG AATATCGGGT TCCAAGGACG GCTAGGCCCG      240
AGAGAATCTA AAAAAACAA TGAATTAGA GAAGCCACG CGGGAGAGCA GGACGGCGGC      300
TTCGGCAGCT CAGGATCCAC CCCNGCGACA GCGTCGACAA GTTCCCTGAA ATGGCGGCCG      360
CTGCTTCCTT GTACTCANAN TCCACCCCCC GAATTCTAGA CCTGCCTCGA G              411

```

(2) INFORMATION FOR SEQ ID NO:600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

```

GAATTCGGCC TTCATGGCCT AATTAAGCCT GCCTACTTCT ACAATGCATT CTGTTACCTA      60
TTTGAACAGT ATGTTTGTA CTATGGCAAT GAAGTCAGTA GATAGGAAAC CAGTTATTCC      120
TTCTACCTTT AAAAAATTTG AGAACTTGCC AACCAGGGAC TAAAGCTATT ATCTTGAACA      180
GAGTCCCTAA AGCTAGTCTA GTTTTGCCA CATCTGCAAT GATTATTGTT TAATTTCAAA      240
AGAATCCTCA GGCTCTACAA TCTAGGGGTG GTAAATGTGT TTCCACTATA CTTGGGACCG      300
CTCGAG                                     306

```

(2) INFORMATION FOR SEQ ID NO:601:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

```

GAATTCGGCC TTCATGGCCT AGGAATCTCC TCTTAAACCA GGTGAAGTGG GAAAGCAGGG      60
ACCATACCAC CCTGAGTGAC ATCTACCTGA ATAATATCAT TCCTCGATTT GTACAAGTCA      120
GCGAGGACTC AGGAAGACTC TTAAAAAGA GTAAAGAAGT CCGCCAGCAG CTCCAAGATG      180
ATTGATGAA GGTCTCTGAC GAGCTCTACT CGGTGATGAA GACATATCAC ATGTACAATG      240
CCGACAGCAT CAGTGCTCAG AGCAAACTAA AGGAGGCGGA GAAGCAGGAG GAGAAGCAAA      300
TTGGTAAATC GGTAAAGCAG GAGGACCGGC AGACCCCATG CTCCCCTGAC TCCACGGCCA      360
ACGTTTCGAT TGAGGAGAAA CATGTCCGGA GGAGCTCAGT GAAGAAGATT GAGAAGATGA      420
AGGAGAAGCA CCAAGCCCTC GAG                                     443

```

(2) INFORMATION FOR SEQ ID NO:602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 585 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:


```

GAATTCGGCT TCATGGCCTA CAACATGTCA GTTTTTTTTT TCATTTTCTT CAATATTTTT      60
CTTCTNGCTT TCTCTTCTCC TGGTTCCAG CCTCTACTCA ATAGTCCCCC CAGCTTTGTG      120
TGCTGGTCTC GGGGCTTCAT GGAGATGAAT GGGCGGGGGG AGTTGGTGGA GTCACTCAAG      180
AGATTCTGTG CTTCCACGAG GCTTCCCCC ACTCCTCTGC TGCTATTCCC TGAGGAAGAG      240
GCCACCAATG GCCGGGAGGG GCTCCTGCGC TTCAGTTCCT GGCCATTTT TATCCAAGAT      300
GTGGTACAAC CTCTTACCCT GCAAGTTCAG AGACCCCTGG TCTCTGTGAC GGTGTCAGAT      360
GCCTCCTGGG TCTCAGAACT GCTGTGGTCA CTTTTCGTCC CTTTCACGGT GTATCAAGTA      420
AGGTGGCTTC GTCCTGTTCA TCGCCTAATA GGGGAAGCGA ATGAGGAGTT TGCACCTCCGT      480
GTACAACAGC TGGTGGCCAA GGAATGGGCG CAGACAGGGA CACGGCTCAC TCCAGCTGAC      540
AAAGCAGAGC ACATGAAGCG ACAAAGACAC CCCACACATC TCGAG                        585

```

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

```

GAATTCGGCC TTCATGGCCT AGTCTGGTAG TAAGGTGGAG TGGGTTTGGG GCTAGGTTTA      60
GCTCGGGGGA GGTGGTGTG GGGGCCGAG GCTGCGCGGT GCCTGGGTAC ATCTCCAGGC      120
CCACGCCCCG GGCTTGGGAA GTCACATCCA TGTCTCTGCG CCGTGCAGCT TTCAAGATT      180
GCCGAAAGGC TCCCAGAGCT CTGTTTTAAA TGGTGAATCC ATCTTTAGAA AGAAGCGTGA      240
TTCTCCTTGA AGTGAGCCTG GCATTTGTCA GACAGGAAAC TCCCAGGAG GAGCACCTGT      300
GGTGGTTTGG GTTGGGTTG TTAAGTGCAG AGAGTGGGAA GAACAGATGC TCCTCACACC      360
GTCTCGAG                        368

```

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 604 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

```

GAATTCGGCC TTCATGGCCT AGGAAAGACC ATCAGCCTGG GAGTCAGTGA ACCTGACTCT      60
GATCCAGCT CTGCCTCCAN TCAGCTGTGT GATGACAGGT AGGTCACCTT CCCTCTCTGA      120
GCCACAGTTT ATCTGTCTGT AAACAGGGGT ATTGGACTGG ATTCTCTGTT ATCTCTCATG      180
TCTCTGTGAA AGGTCTGTGT TTCAAAATAC TCCTTAGGGA CATGACCTCA CATAGAAAGA      240
GGGGGTGCCA CGAACTGGAT TCCAGCACT CCCCTTCCC AGCTCTGCTC AAGCTGAGGG      300
ACCTTGGAAC ATGGTACTTG GACCTAAGTA CTCTCTCTGG GCTTCAGTGT CCCCAGCTAT      360
AAAATGGGGG AAATGCCTAA CTCAGGAGGT TGAGGTAAGG ACAAAGGAA TTAATACATG      420
GAAAGTGCCT GGAACAGTGC CTGGCACAGT CTGCTTTCAG AAAAGCTGC AAGGTGGCTA      480
CTCTCAGCAG ATATAAGTTA ATGCAGGAAC AGCAACTAGC AGCTCTTGA CATGCAATAT      540
ATTATATATT TTTTGCATCT TTTACCCTTC ACGGCACTGA GCCTCACAAT CCGTTGACCT      600
CGAG                        604

```

(2) INFORMATION FOR SEQ ID NO:605:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

```
GCGCAGCCAG CGCCTGCCTC CGACTCGACT CCACACCTGC TTGCTACAGC GGGTGAGGAA      60
GCAGGAAAGG GGGAGGGAGG GATGTCGTCT GGATTCTGTG AATAATTTGT TTCATTGTTT      120
CCAATCGACT TAGTCACCAAG GTTAAATAGT AGCATAGACC TTTCAAAAAA GTAGCTAGCT      180
TATAAGTAGA TGTATTGAAA ACACCTGCTT GTTGAGTCGT AGACAATTCC TCATTACTG      240
TGTGAACTCT AGGGGGTGAA ACACGGGCGG AGAGCGGCTG TGAGCTCAGC CGGCTCCATC      300
CCCACAGCGG CCCAGGGTCA CTCGGGGCCA TTAATCAGGC CGCAGAGCTG CCCTCTGAGC      360
CGGGCCGCCA GCGCCACAG GGGCCAGACC AGGGCTCCCT GGGCGGGATG TTTTAAATCG      420
CACAGGGACA AAGGAAAGGA AAGACGCTGG GGCCCAAGCC CGAGCTTATG AAACGTTATC      480
AAGGAGCGAC TCGAG                                     495
```

(2) INFORMATION FOR SEQ ID NO:606:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

```
GAATTCGGCT TCATGGCCTA GACTTCCAAG GACATGCTTC GAACTCTGGC CCAAGCCAAG      60
AAGGAATGCT GGGATCGGTT CCTCCAGGAG AAGTTAGCTT CAGAGTTCTT TGTGGATGGA      120
CTTGATTCTG ATGAGAGGTG ACTACAATTG CAAAGTAGAA TTTGCTTTGA CACCTGATGC      180
CAGGACAATA GTATGTTACC ATCCTTCTAT AGACATTCCA TATGAACGCA CAAAACCTAT      240
CCCTTGACCA GATCCTGTGT ATAATAATGA AGAAACACAT GGTCAAGTGC TGAAACTAG      300
AGAAGAAAAA AGTGAACACC TGGAGCTCGA G                                     331
```

(2) INFORMATION FOR SEQ ID NO:607:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 632 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

```
GAATTCGGCC TTCATGGCCT ACTGCCTCGG CCTCCCGAGT AGCTGGGACC ACAGACGCCC      60
ACCACCATGC CCGGCTAAAT TTTTGTATTT TTAGTAGAGA CGGGTTTCAC CGTGTTAGCC      120
AGGATGGTCT CGTTCTCCCG ACCTCGTGAT CCGCCCGCCT CGGCCTCCCA AAGTGCTGGG      180
ATTACAGGCG TGAGCCAAC TCGCCGCGCA GGAATCCCTC CTCTGTCTGA CCTAACTGCC      240
CTCTGCCCTG GAGCTGCTCA GCCTCTATCA ATTTTCTGG CTCTCAGCGA ACGTTTTCAT      300
TCAGTTGCAA GACACAGAAA CTCAAATTCA AACCTGCTTA CACAAAATAG TGAATGTACT      360
GGCTCATGCA CTTTTAAAG AGATGAGGTC TGTGTGCTG CCCAGGCTGG ATGTGAACTC      420
CCGGGCCCAA GAAATTCTCC TGCCTCAGTC TCCTGAGTAG CTGGGACCAC AGGAGCATGA      480
CTGTAAGTCC TGGTGTGAAT CAGGCTCCAG AAACAGCTTG ATCCTGGTTC CCAACAGTAT      540
GGTCAAACT CATTCTCTCT TCTGTCTTCT TCTCTATGAC AGGTGCTCCC TAAGAAGTGA      600
CAAAGAAGGC CACTAACAGC TCTGGGCTCG AG                                     632
```

(2) INFORMATION FOR SEQ ID NO:608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

```

GTATNGNTGA AAATAAGAAA AAATATTTCT GAAATTCGGG AACTTGAGAA CATAGAAGAA      60
CACCAGTCTG TAGATATTGC AACTTTGGAA GATGAAGCTC AGGAAAATAA AAGCAAAATG      120
AAAATGGTTG AGGAACATAT GGAGCAACAA AAAGAAAATA TGGAGCATCT TAAAAGTCTG      180
AAAATAGAAG CAGAAAATAA GTATGATGCA ATTAAATTCA AAATTAATCA ACTATCGGAG      240
CTAGCAGACC CACTTAAGGA TGAATTAAAC CTTGCTGATT CTGAAGTGGA TAACCAAAAA      300
CGAGGGAAAC GACATTATGA AGAAAAACAA AAAGAACACT TGGATACCTT AAATAAAAAAG      360
AAACGAGAAC TGGATATGAA AGAGAAAGAA CTAGAGGAGA AAATGTCACA AGCAAGACAA      420
ATCTGCCCAG AGCGTATAGA AGTAGAAAAA TCTGCATCAA TTTTGGACAA AGAAATTAAT      480
CGATTAAGGC AGAAGATACA GGTAGAACAT GCTAGTCAAG GAGACCTCGA G          531

```

(2) INFORMATION FOR SEQ ID NO:609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

```

GTGACTTTGG AACCTTGAGA GTTAGATGAA TAAATCAGAA AAATGGAATT AAATGTATCT      60
ACTTTATTAT TGGTAAATCT GGTAGGATG TGCAGCCCTA ATCAGGCTTC CTTAATTCCT      120
TCTCCACTGA GTCTGGACCA GCACTCTCCA GTAGAACTTT CTATGATGAC GGAAATCCTC      180
TGTGTCTGCG CTGATCAGTG TGGTAGTTAC TGGCCACATG TGGCTGTTGA GTACTTGAAA      240
TGTGGCCAGT GTGGTGATGG AATTGTGTTT TTAATCTTAT TTAATTTAAA TTAAATAGC      300
CAAATGTGGC TAGTGGCTGT TGTACTCGAG                                330

```

(2) INFORMATION FOR SEQ ID NO:610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

```

GTGGAGGCTT TCTTGATCAT GGATGGTGAA GATATACCAG ATTTTTCAG TTAAAGGAG      60
GAAACTGCTT ATTGGAAGGA ACTTTCCTTG AAGTATAAGC AAAGCTTCCA GGAAGCTCGG      120
GATGAGCTAG TTGAATTCCA GGAAGGAAGC AGAGAATTAG AAGCAGAGTT GGAGGCACAA      180
TTAGTACAGG CTGAACAAAG AAATAGAGAC TTGCAGGCTG ATAACCAAAG ACTGAAATAT      240
GAAGTGGAGG CATTAAAGGA GAAGCTAGAG CATCAATATG CACAGAGCTA TAAGCAGGTC      300
TCAGTGTTAG AAGATGATTT AAGTCAGACT CGGGCCGAAC TCGAG                                345

```

(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

```

GAATTCGGCC TTCATGGCCT AAATGACCAN ATCGAGAGGG AGGACTATGA GGACTTTGAG      60
TACATTCGGC GCCAGAAGCA ACCCAGGCCA CCCCAGGAGG GAGGAGGAG GCGGAGCGG      120
GTCTGGCCAG AGCCCCCTGA GGAGAAGGCC CCGGCCCCAG CCCCAGGAAG GAGGATTGAG      180
CCTCCTGTGA ACCTCTGCTG CCCCCTGCTG CCCCTGACTA TGGTGATGGT TACGTGATCC      240
CCAACTACGA TGACATGGAC TATTACTTTG GGCCTCCTCC GCCCCAGAAG CCCGATGCTG      300
AGCGCCAGAC GGACGAAGAG AAGGAGGAGC TGAAGAAACC CAAAAGGAG GACAGCAGCC      360
CCAAGGAGGA GACCGACAAG TGGGCAGTGG AGAAGGGCAA GGACCACAAA GAGCCCCGAA      420
AGGGCGAGGA GTTGGAGGAG GAGTGGACGC CTACGGAGAA AGTCAAGTGT CCCCCATTG      480
GGATGGAGTC ACACCGTATT GAGGACAACC AGATCCGAGC CTCCTCCATG CTGCGCCACG      540
GCCTGGGGGC ACAGCGCGGC CGGCTCAACA TGCAGACCGG TGCCACTGAG GACGACTACT      600
ATGATGGTGC GTGGTGTGCC GAGGTCACTC GAG      633

```

(2) INFORMATION FOR SEQ ID NO:612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

```

AAATACTAGA GATAAAGTAG ATTCATGGCT TGGTAAGGAA ATTTTAAGCA TTCCTTCAAA      60
GATTGACGTG CTAATAAAG CATTGATGTT TTGAGTTTTT TTACACCTAG GATTTTTAGC      120
TTGGGTGTGT AGGTGAAGGC CAAGACTCTC TGCAGGAAAA AGCTTATTTT CAAACTCAGA      180
AAATAAAATG TCAATCATAA AAATCTACTT CAACTTTAGC AAAAAGAAAA AAAAATCAA      240
CAAAAAGTAT ACTCTGTATG CTGGGATTCC GAGGTTCCAA CACTCTGTTA CTCGAG      296

```

(2) INFORMATION FOR SEQ ID NO:613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

```

GATCCAGTGC TGCAGCTTCC TTACTATGAA ATGACAGCTC CACTTCCTAA TAGTGATCC      60
GTGTCTTCCT CACTGAATCA TGTTCAGAT CTTGAGGCTG GACCCAGCTC ATATAAATGG      120
ACTCACCAAC AACCAAGTGA CTCTGACCTT TATCAGATGA CAGCTCCACT TCCTAATAGT      180
GCATCCGTGT CTTCTCACT GAATCATGTT CCAGATCTTG AGGCTGGACC CAGCTCATAT      240
ATAATGGACT CGCCAACAAC CCCTCGAG      268

```

(2) INFORMATION FOR SEQ ID NO:614:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```

GGTGGAACT ATCCAAGAGG CCTTCTGAAT TCCTCTGACA TATATTTGAG AAAC TGGGCT      60
ACTGAAAGCC CTAACCCAC TTGGCTGCAT TTTATTTGGT AACCAGTGAG GCAAACACCC      120
TTGCCAGACC CCTACCATCC ATCTTGATGT GGTTCCTGCA CTGGACACTG CTTGGGTACG      180
GGCCTGCCCA GATCTTGGGA ATGTGGGCAG TGGCTCCTCT GAAGCACCAG TGGGCAGAGG      240
ATGAGTCATG GTATCCTCCC GGCACCTCG AG                                     272

```

(2) INFORMATION FOR SEQ ID NO:615:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```

GAATTCGGCC TTCATGGCCT AGTATTTTGT TAGAGACGGG GCTTCAGCAT ATTGGCCAGG      60
CTGGTCATGA ACTCCTGACC TCAGGTGATC CTCCTGCCTC AGCCTCCCAA AGTGCTGGGA      120
TTACAGGCAT GAACCACTGC ACCCAGTCAA GGGTATAAAA TTCTACACA GCACAGGCAG      180
ATTCTGGCTG TGAAGACCC CAAGATTCTT TGAATTGTG ATGCTTTATT TAATTTAGAG      240
ATTATCTTCT CTGTCCCACT CTTCCCTTC CTA AAAAGGA CTAGATGCTT GCTGCTTAAT      300
TAGTAAAGCA AATTTAAGAT AATTTTCTGC TTTGAGATT AGGGATAGAT TTTTAAACAT      360
AGTCTTGCTG ATAATGATAG ACATCCTGGG ATGTTGAAA TTAGGAACT TGAACTTTAA      420
TTGACACAGA CTGAGAATTA TGACTGAGGA AAAGTTAGAG GATCAGAAAA AATAAATTTA      480
TAAATCACA GCTAGGCTTG GCAATATGAG TGGCGCTCGA G                                     521

```

(2) INFORMATION FOR SEQ ID NO:616:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 577 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```

GAATTCGGCC TTCATGGCCT AGATTGGAAG GTGTGGTAGG CAGAATTCTG GCCCCATGA      60
CTGCCCCCTC CCCTCACACC CCCC GGTTG CTCCAATGGT TATGTCACGT TGCTTGGCAA      120
AAGGGACTTT GTAGATGTCA TAAAAGGTGA CTAATCAGCT GACTTGAGAG AGTTTATCCT      180
GGATTATCCA AGGGGCCAG TGTAATTCCA AGAGCCCTCA AGAGCAGAGC TGGAGAGATG      240
CCGCGCAGGA GGCCTGGGTG CCGTTTCGGA GCAGGATGGA AGGCGGTGAA TCCCGCTCC      300
AGCATGGAGC TCGGGAGAGG CCCTGACTGC AGATGGAGAG GCTGCCCTGG CCGCAGCGCA      360
CGGGGCTCCT GACCCACAAA AATCGCGAGA TAATGAGTTC ATGTTGTTTG AAAGTCCGTC      420

```

ATTTCTGGTA ATTTGCTATA TAAACTATT GCTATACGAT TAAAACTAA TACAGAAGAA 480
 TATTTCTTTA ACATTATGTT AAAAAGGAAA AAAGCTAACA TTTTCTTTAT AGCAAAACAC 540
 TGCCATGATT TACATTAAAA TTAGGAACAT ACTCGAG 577

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC TTCATGGCCT AGCACATACA GTATAAAAA TAATCACCCA CCATAATTAT 60
 ACCAAATTCC TCTTATCAAC TGCATACTAA GTGTTTTCAA TACAATTTT TCCGTATAAA 120
 AATACTGGGA AAAATTGATA AATAACAGGT AAGAGAAAGA TATTTCTAGG CAATTACTAG 180
 GATCATTTGG AAAAAGTGAG TACTGTGGAT ATTTAAATA TCACAGTAAC AAGATCATGC 240
 TTGTTCTAC AGTATTGCGG GCCCTCGAG 269

(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC TTCATGGATT CTGCTTTGAA TATAGCTACA GAAATAAAGG ATGGACTACA 60
 ATGTGGGACA GTGTCTTCTC AGAAACAACC AGCCTTGAAG GCTACAAC TGACAGGAAGA 120
 TTCTGTTTCG AATATAGCCA CAGAAATAAA GGATGGAGAA AAATCTGGGA CAGTGTCTTC 180
 TCAGAAACAA CCAGCCTTGA AGGCTACAAC TGACGAGGAA GATTCTGTTT TGAATATAGC 240
 CACAGAAATA AAGGATGGAG AAAAATCTGA GACAGTGTCT TCTCAGAAAC AACCGCCTT 300
 GAAGGCTACA ACTGACGAGG AAGATTCTGT TTCGATTATA GCCACAGAAA TAAAGGACGG 360
 AGAAAAATCT GGGACAGTGT CTTCTCGGAA AAAACCAGCC TTGAAGGCTA CAAGTGATGA 420
 GAAAGATTCT TTTTCGAATA TAACCAGAGA AAAAAAGGAT GGAATCGAG 469

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCGGCC TTCATGGCCT AGTCCGTGTT GTGGTCAGTG TGTGAATCC AACTGGACA 60
 GTAGCTGAGT TTGGGCAGGG ATGAGGAGTG GAGGGGTGAG GTCTAAGGTT CAGAAAAAGT 120
 TTGTGTTTAA GAACCTGGTT AACTGGAGT CAGTTGCAGA CCAGAATGGA GAAAAGCACT 180
 CCTGACTTGA GTTGGGTGTG CTTGGGACTG GATCACCTTT GACCTTCTTT ATTTACCTAA 240

```

TTGGAGGGAA GAGCAGGGGA GGCAACACTA TTTCTCTTGG GTGTTAGAAG AAGATTGAG 300
CTTATTGGG CACTGGTCTC TATCTTTGCC TTCAGCTGAA TCAACATCTA AGATGTTTAA 360
GATGCTTAGC TAATTCCTCT TAAAAAAGA ATAAGCAGAG GCCGGACGTG GTGGCTCATA 420
GCTGTAATCC CAGCAGTGTG GTCTCGAG 448

```

(2) INFORMATION FOR SEQ ID NO:620:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

```

GAATTCGGNC TTCATGGCCT ACTTAAATCC ATCAAGTTAC ACAATCGATC TGTGTCAGC 60
TGAACAGAAC CACATTAAAT TTAAGCCAAA CACACCAATA GGAATGTTGG AGGTAGAGAA 120
GGTAATTTTA AAGCCAAAAA TGTTGGATAA GAAAAAACCT ACACCTATAA TACCAGAGAA 180
AACTGTGAGA GTAGTGATTA ATTTAAGAA AACACAGAAG ACCATAGTGA GAGTGAGTCC 240
ACATGCATCG CTTCAAGAGC TTGCCCTAT TATATGTAGC AAATGTGAGT TTGATCCGTT 300
GCATACACTA TTGTTGAAAG ATTATCAATC GCAGGAGCCT CTGACTTGA CAAATCTCT 360
TAATGACCTG GGAATAAGAG AATTATATGC GATGGATGTC AACAGAGAGT CCTGCCAAT 420
ATCACAAAAC CTAGATATTA TGAAGGAGGC CCTCGAG 457

```

(2) INFORMATION FOR SEQ ID NO:621:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

```

GAATTCGGCC TTCATGGCCT ACTCTCTGAT TTACAGATTG CTAATTAAAT GGCTATTATT 60
AGTTTGGATT AATTAGACTT AAGAAAACAA CTAAGTGAAG GTTTTTTTTG TTTGTTTTTT 120
GAGGGTTTTT TTTGCATGAG AATTGTATGT AACCAAGTAT ATGATTATTC CTGAATGTAC 180
AGACAGAAGT AAGCCTGGAC ATTGTTAAAT AGTCCCTGCT TTAAGGGACT ACGATAATGT 240
GTACTATGAC AAACGTGCTT TATTCTTCTA ACGCAGTAAG TCTCGAG 287

```

(2) INFORMATION FOR SEQ ID NO:622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

```

GAATTCGGCC TTCATGGCCT AGTAGGTGTA TCACAGATTT CTAATGTAGA ATGGTCAGTC 60
CAGGAGTAAT TGTAATTGTG GAAAAATGGA GAATTATAAA ACAAGAATGA TGTGCAAAAA 120
AGGACACAGT TGAATTCATC TGTGTTCTC TAACTATTT CATTTACTCA TTCATCCAAG 180

```

```

TTTTGAAAAA TGTTGGGAGT CTGAAAAATT CCAGGCACTC TGGATAAATG AGTATGGAAG   240
AATCCTCCAA AAGAACTTTT AGTCTACAGG GGAACATTAA TAAGCAATCA GGGACTTGAG   300
ACCTACAGTG CTGTGGAAGA TTCTCGAG                                     328

```

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

```

GAATTCGGCC TTCATGGCCT AGGACGTTTG GGTGTTTCC ATCTCAAATA AATAAATAAA   60
TAAAAGTCTA TAAAAACAGC TGGGCCCAGG CATTAAAAA AATGTTCCGT CTCTAGTTT   120
AGTCTTTTAT TGTCTATGCA AATTCTTTGG CTATTGAACT ATCCAAGCTT TCTCTTTTAA   180
AGCTTTTGGG GAATAGGTTG CAATACATTT CTTGTCTACT GTTCTCTTAA GTGTTTCTTA   240
ATTCTAACCC ACTGTTTTTG GAATTTCTAT TAGATGGTTT TGCAACTTCT GCATCTATCC   300
TCCATGCACC TTCACATTC CTTACAGTT TCGTGCTGT TTCCTTG TGCTACATTC   360
TGACAGGAC TCGAG                                     375

```

(2) INFORMATION FOR SEQ ID NO:624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 763 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

```

GAATTCGGCC AAAGAGGCCT ACCTCAAAGG ATTGGCTAAA AGCAAGCAAC TGGATTGAAC   60
ACCCTAAGAA GAAAGATTCA CACTGCCACCA GGAGACATCA GAAAGAATGA AAACCTGCCC   120
GCTGTTTGTG TGCATCTGTG CACTGAGTGC TTGCTTCTCG TTCAGTGAAG GTCGAGAAAG   180
GGATCATGAA CTACGTCACA GAAGGCATCA TCACCAATCA CCCAAATCTC ACTTTGAATT   240
ACCACATTAT CCTGGACTGC TAGCTCACCA GAAGCCGTTT ATTAGAAAGT CCTATAAATG   300
TCTGCACAAA CGCTGTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTCCT   360
AAATCCTCAC CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT   420
AGTGGCTACA ACCCAAATTC CATCTGTGAC TTTCCCATCA GCTTCCACCA AAATTACTAC   480
CTTCCAAATG TGACTTTTCT TCCCAGAAT GCCACCACCA TATCTTCAAG AGAAAAATGT   540
AACACAAGCT CTTCTGTAGC TACATTAGCA CCAGTGAATT CCCAGCTCC ACAAGACANC   600
ACAGGTGCCC CACCCACACC TTGTGACAAC TACACNAGCT CCACCATCTT CCTCAGCTCC   660
ACCAGAGACC ACAGTNGCCC CACCCACACC TTTTGCAACT ACACNAGCTC CACCATCTTC   720
CTCAGCTCCA CCAGAGACCA CAGCTGCCCC ACCCATCTTC GAG                                     763

```

(2) INFORMATION FOR SEQ ID NO:625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

GAATTCGGCC	AAAGAGGCCT	AGTAGTTTCT	ATGTGCGGTC	TGGGGTGGGG	GCAAGGCCCT	60
TGTGTTCCAC	TGGTTTCCAC	CACGTGACA	GCAGTCGCTG	GCAGCAGAGA	GCCATTTCTT	120
GTCATGCTGG	TCTGTTCCAG	GACTCTGTGG	AAGATTCTCT	ATCTCCACTG	GCACAGGAGC	180
AGAGGAAATG	GAAGGACTCA	CAGGCAGAGC	AGATCTCATC	CCCCAAGCCT	GTTGGGAGCC	240
ATTACTTTGG	GTCGAAACAT	TATTGTGAAC	ACTAAGTTCT	TCAGGTTTGT	TAGCACATGC	300
TTTCATTTGT	AGAGTTGCTC	TAGAATATCG	TTTGCTGGGC	CTTCTTTCAA	AGGATGTTGA	360
TCTTCTTGCT	TTATTGGTTT	TTGTGGTCTG	ATACTCTGTT	TTCCCACTAT	ATCTAAATCG	420
TGATCCTAGT	CGAATAAATC	CTGATCGATG	AGAACTCTTT	TGGACGGGGC	CTCGAG	476

(2) INFORMATION FOR SEQ ID NO:626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GCGATTGAAT	TCTAGACCTG	CCTCAACTGT	CTGGTTTCTT	GTAAATAAAA	CACATTGTTT	60
TATATTTTTA	GGGAACAAAA	AGTGCTGCTA	TAGGGTTCAA	AGTTTTCCTT	CTGAACACTT	120
TTCCGAAACA	AATTACCCCA	AAGACACATT	TTGAATATCC	TGGTCACATC	TTTGGATCTG	180
TAAATATAC	CTTTTAGTAT	GGCACCTGTT	AAATGCAAA	GCAAAAACCT	CGAG	234

(2) INFORMATION FOR SEQ ID NO:627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTG	AATCATTCAG	CATAAGGAAC	TGTCAATATT	60
TTTTTGAGCT	GTCAGAAATC	CATTTAGTGA	TTTTGACAA	TTCAAAAAAA	TATTTCTGAC	120
CGCTTGATTG	AGTTCCTAGT	GAATTAGGGA	AGAAGAGGAA	TAAAAGAAAT	ATATCAATCT	180
AAATTATGAA	CCCAGAGTCT	AGCTTCCTGA	ATTCTTCTCT	GTGCTTAAAC	GAACAACAGG	240
ATGTTGAGGT	TCAAAAATAC	TCTCTTCTAT	TTCCCCCCTT	TCCTTCCCTT	TTCTTTCTTT	300
CTCTTCCATT	CCTCGAAAAG	ATAATAAAAC	AGAATGTGCC	TAGAGCTTCT	GGAAAGAATA	360
CAGTCCTGCT	GATACTAGAA	CTCAGTGAAA	TTTGACCCAG	ATTCTGAGC	TACAGAACTG	420
AAGATAATTC	ATTTATTTCA	AGCCACTGAG	TTTGTGGTAA	ATTGTTTACA	GTAGCAATAA	480
AAATCTAATA	CATGCCTTCT	ATACCAGAAG	TACACATCCA	CGTGACCATT	CCTGTCCTCA	540
CCCCACACAC	ACATACACAC	ACACACACAC	ACGCACACTC	GAG		583

(2) INFORMATION FOR SEQ ID NO:628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGTTCCTACT GCCCCGGGGC GGCCTGCACA      60
GAGCTGCTGC CCTCCAGAGA CTGTGAATCC CAAGCCTGAC TCAGTGGACT GCTTCCTGTT      120
CCCCCTCCTC CTCTTCCTCA CCTTGTCTCG CACCCTCAAG CTTTCTCCA ATGCCTCCCA      180
GGAGGATTTG GGGACTTCT CCCTGGGGCG CCCAGATCCA GCTCGGAGGC CTCACTGGGA      240
CCTGGCAAGG CCGACCTCC CGCCAAACT TGCTTCTGTA GCCCCCTAC TCGAG              295

```

(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

```

GAATTCGGCC TTCATGGCCT AACCTGTTGC TTCCCTGGG ACTGAAGGCA GAAGTGACTC      60
CCGAAATCTCT CTTTCTGGAC TCAGAAGGAA ACCAAAGCAA TTGATGACAC CGCATCCCAT      120
ACTAAAAGCT ATGGAAGAGA GAGCAATTCA ACGAGCTGAA TGTAGGCGGA TCTTGGCAGA      180
GAAGNAGAAA AAACAAGAG AAGANAAATT GGCCCAAGTA AAGGCCCAAG AGGAGGAACG      240
TCAGAAAAGG GAGGCAGAAG AAAAGGAGGC ACAGCTTGAA AGAAAACGAG AAGAGAAGAG      300
ACTGAAGAAA ATGAAAGAAC TTGAGAAGCA GAAGAGAACT CGAG              344

```

(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

```

GAATTCGGCC TTCATGGCCT AGTTCTTCCT TAGGAACAAG GGCAGGACCT CAAACAGTCC      60
AGAGGAGAAG CCTGGGGTGG TCAGGGAAGG CTTCTGGCT GAGAGGACAG GCTTAGGGGC      120
ACCTTGAAAG TTCAGGCTGA CTGGGGCTAG GGGCATGTGG GTAACAGGTT AAAGGGGGGG      180
GGGCTGGAAG ATGCAGACAC CAAAGACCCT TCAATATGAG GCCAAGAAAG GAAGGTTTCAG      240
AACAGGGATC ACTCGAG              257

```

(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

```

GTTCCAAATC CATGGGAACC AGCACAGGAG CTACAGCAAA TCATGGCACT TCTGCAGTAG      60
CAATTACTAG CCATGATTAC CTAGGACAAG AAACCTTGAC AGAAATCCAA ACCTCACCAG      120
AAACATCAAT GAGAGAGGTG AAAGCGGACG GAGCTAGCAC CCCCAGGTGA AGAGAACAGG      180
ACTGTGGTGA ACCTGCCTCG CCAGCAGCAT CCATCTCCAG ACTCTCTGGG GAACAGGTCG      240
ACGGGAAGGG CCAGGCAGGC AGTGTATCTG AAAGTGC GCGG GAGTGAAGGA AGGATTAGTC      300
CAAAGAGTGA TATTACTGAG CTCGAG                                         326

```

(2) INFORMATION FOR SEQ ID NO:632:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

```

GAAAAAATGG AAGAATTTGT TTGTAAGGTA TGGGAAGGTC GGTGGCGAGT GATCCCTCAT      60
GATGTACTAC CAGACTGGCT CAAGGATAAT GACTTCCTCT TGCATGGACA CCGGCCTCCT      120
ATGCCTTCTT TCCGGGCGCTG TTTTAAGAGC ATTTTCAGAA TACACACAGA AACAGGCAAC      180
ATTTGGACAC ATCTCTTAGG TTGTGTATTC TTCTGTGCC TGGGGATCTT TTATATGTTT      240
CGCCCAAATA TCTCCTTTGT GGCCCTCTCT CAAGAGAAGG TGGTCTTTGG ATTATTTTTC      300
TTAGGAGCCA TTCTCTGCCT TCCTTTTCA TGGCTCTTCC ACACAGTCTA CTGCCACTCA      360
GAGGGGCTCT CTCGGCTCTT CTCTAACTG GATTACTCTG GTATTGCTCT TCTGATTATG      420
GGAAGTTTGT TTCCTTGGCT TTATTATTCT TTCTACTGTA ATCCACAACC TATTCTCGAG      480

```

(2) INFORMATION FOR SEQ ID NO:633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

```

GAATTCGGCC TTCATGGCCT AGCGGGATCG TATCACTACG CACGTGGCGT CAATGACAAA      60
GACGCCTTCC CCACGGGACA GGCCCTGGGA ACTGCGGGGC AAGGTGTGGG CACGGCGGGT      120
CGCCTTCCAA CCCTCCAGGG TCTCCGGTCC TGCCCTCTCT CCAAGACCCA GAGATTCTCT      180
CCATCCGGTG CCTCCGGGAG CCCAGGGTCT GGGGAGTGTC TGGCTATGGC GGGGCGGCTG      240
CTTTTATAGG GAGGGAATCC AGCATTGGG AAACCAGATC TGTTCTCCTT CTTTCCCTTC      300
CCTCGAG                                         307

```

(2) INFORMATION FOR SEQ ID NO:634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

```

CCTCTGCAAG AAATGCCTAA GCGTATTATC AGGAAGTGGA ATTATAAAAT GTTTCAGAT      60
CAAATTAAGC ATCTACAGGT GAATTAATAT AGAATTAAGC TTAGAAAGCT TAAGTAGAAG      120
TTGAATGAAT TGTGTTCAAT CTTTGAAACC CATTGATTTG CAAAACCAAT ATTCCACTGT      180
CTATAGGAGG CAATTCAGAC TGAAAATAAT TTAGAAAAAA AAATAGTCCA GAAAAAATAA      240
TAGTTCTAGA GATAAATAGG TCATTGGAAG ACTAACCTCT GCCATTAGGG GTTTCTAAAG      300
ATAGGCTGAC TCTATCTATT TAATAATTAT TTTGTTCAAT AACTCCTTGC ATATAGAATT      360
GTAAGTGATA CCAGCCAGGT ACGGTGGCTC ACGCCTGTAA TCCCAGCACT TTGGGAGGCC      420
AAGGCGGGCA GATCACCTAA GGTGCGGAGT CTCTCGAG      458

```

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

```

GAATTCGGCC TTCATGGCCT ACCCACTCTC ACTTTGTACC TCTGTCAGTT ATCTCCTCTT      60
TACCCTTCTT TCAACGAGCA TACCACCGGC CCTCCCAGCA CCTATGGCCC AAGCCAGTTG      120
TTTGCAAATT TTATACTGTG ACACAGGACA ATTTACACAC ACATACACAG TTTCACTTGT      180
GACATACTTT TTTTGTAGA TGGAGTCTCA CTTCAATTGCC CAGGCTGGAG TGCAGTGGTG      240
TGATCACACC TTATTGCAGC CTCAAACCTC TGGGCTCAAG TGGTCTTCCT GCCTCAGCCC      300
CCCTAGTAGC CAGGATTACA GCGTGCACC ACCATTCTC GAG      343

```

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GTGGATAACA AACAAACAAA TCTGATGCTC CCTGAGTCAA CTGTTTATGG TGATGTGGAC      60
CTTAGTAACA AAATCAATGA GATGAAAACC TTCAATAGCC CAAATCTGAA GGATGGGCGT      120
TTTGTCAATC CATCAGGGCA GCCTACTCCT TACGCCACCA CTCAGCTCAT CCAGTCAAAC      180
CTCAGCAACA ACATGAACAA TGGCAGCGGG GACTCTGGCG AGAAGCACTG GAAACCACTG      240
GGACAGCAGA AACAGAAGT GGCACCACTG CAGTACAACA TCGTGGAGCA AAACAAGCTG      300
AACAAAGATT ATCGAGCAAA TGACACAGTT CCTCCAATA TCCCATACAA CCAATCATAC      360
GACCAGAACA CAGGAGGATC CTACAACAGC ACAGAGCTCG AG      402

```

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

```

GCTTCCTCGC AGCAAGCGGC TGGAGATAGA GAAGAGCTTA CTGGTGCAG AGTCCGTCGA      60
CCCCGTCGCC GCTGACCTAG AGATGGCAGC CGGTCTCACC GACATATTTC AGCATGATAC      120
ATACTGTGGT GATGTCTGGA ACACCAACAA ACGCCAGAAT GGCAGACTCA TGTGGGCTCTA      180
TCTCAAATAC TGGGAACTCG TTGTGGAAGT GAAGAAAGTT AAGAGAGTAG AGGAAGCCAT      240
ACTAGAAAAG TAAGACAAGA GTGAAATCAA ACTGCTTTTA GTGACTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

```

GTCGAGAAAA TGGGGATAAT GGAGAAATTG TGGGCAAGCT GGCTTCCTGG GAAGGGACTA      60
ATTGAACAAG ACAATGATTT ATCTTTTCGG GGTTCAGAGG CAGCTTGTTA ATTGGAATTA      120
TTTTCTTTAT TTTTGCCAC AAGTGTTTGG TTGTCTTTT CTCTGGCTTT TTACCTGATC      180
AGGCTGCAAG CTGCAAAGGT GTGGCTTGTG CTGCAGATTT GTAATAAAAG ATGACAGGTG      240
AGAGAGACAG TGGTGGAAGT GGTAGAGCTT GCACACCCAC ACGGTGTGGC TGCTCGGGAG      300
GCTGTCTAGT GCACCTGCCA ACAGAGCACA GATATCCTCT CTTCTCATT TCAGATTCCT      360
CCTCCAGCT GTTTACTAAA CAGCAACAAA AACACCCTCT TGGCTGTAAC TTGTCAAATA      420
AAGTCCCTGC AAAGTGATA AGATTTTCTT CCCCACCTC GAG      463

```

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

```

GCGAGGGAGA TGGCAGCCTG GGCTTTAGCA GCAGGGAGGA AGGTGAANAA AGAACCGGGG      60
CTTGCAGCAG AGGTGGGTTT TGCCTTAAAG GCAGAGACCC CCAACAACCTG GAATGCCACG      120
GAAGACCAGC ATGAGCCTAC CAAACCTTTG GTTCGCAGGG CTGGAGCTAA TTCTCGCTCC      180
AGGAGAAAGA AGCAGAAGAA GAACTCCAGG CAGGAAGCAG TGCCCTGGAA AAAACCCAAA      240
GGCATCAATT CCAACAGCAC AGCTAACTTG GAGGATCCTG AGGTGGGTGA TGCTGAAAGC      300
ATGGCGATCT CAGAGCCGAT CAAGGGCAGC AGAAAGCCCT GTGTGAATAA GGAGGAGTTG      360
GCTTTGAAGA AGCCCATGGC GAAATGTGCC TGGAAAGGTC CCAGAGAGCC ACCTCAGGAT      420
GCCCGGGCAG AAGCCGAGAG CCCAGGAGGC GCCTCTGAGT CAGACCAAGA TGGTGGCCAT      480
GAAAGCCAC CAAAGAAGAA GGCCGAGCTC GAG      513

```

(2) INFORMATION FOR SEQ ID NO:640:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

```

GAATTCGGCC TTCATGGCCT ACACCTCAGC CTCAGAGCA GCTGGGACTA CAAACGTGTG      60
CCACCATGCC GGGCTAATTT TTGTATTTTC AGCAGAGGTG GGGTTTCACC ATGCTGCTGG      120
CCAGGCTGGT CTCGAACTCC TGGCTTCAAG TAATCTGCCC ACCACAACCT CCCAAAGTGC      180
TGGGATTACA GGTGTGAGCC ACTGCGCCCA ACCAAGAGCT CCTTTTGTGTT TTCTTTTGT      240
TGTGAATTCG GATTCTTTAT ATTCAAGAGT TTTACTTAAA CTTTGAATCT GAAAGAAACT      300
TTAGGAGGAG CTCATAGATT TGTGGGAAGA AGCAAATCTA CATTATTTTC TCTCTTCTAA      360
AATCATATTC CATGTATTTT GATCTTTTAC TGAATTTTAA CACATTGTTT CATCACTAAC      420
ATAAAGTGTG TCAATAGTTT TTGTAACCTA CACACAAATA CTGGATTATA AAGTTATATA      480
CCTGAGTATA TTTTATGGC AGGTCTCGAG      510

```

(2) INFORMATION FOR SEQ ID NO:641:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

```

GAATTCGGCC TTCATGGCCT AGTGTTCCTA GCCAGTCTCT ATTCTCTCAC CTAACACTCT      60
CAAGGAGATA GAAGCTTCAG CTGAAGTCTC ACCCACCACG ATGACCTCCC CCATCTCACC      120
CCACTTCACA GTGACAGAAC GCCAGACCTT CCAGCCCTGG CCTGAGAGGC TCAGCAACAA      180
CGTGGAGAG CTCCTACAAT CCTCCTTGTC CCTGGGAGGC CAGGAGCAAG CGCCAGAGCA      240
CAAGCAGGAG CAAGGAGTGG AGCACAGGCA GGAGCCGACA CAAGAACACA AGCAGGAAGA      300
GGCTCGAG      308

```

(2) INFORMATION FOR SEQ ID NO:642:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

```

GAATTCGGCC TTCATGGCCT AGTTAGATGA AAATCTAAG GATGAATACT TTGAGGAAAT      60
CATGGAAGAA TATGAAGATA TTAGACAGGG CCATTATGAG TCTCTCAAGG AGAGGAGATA      120
CTTACCCTTA AGTCAAGCCA GAAAAAGTGG TTCCAAATG GATTGGCTGT CTGAACCTCA      180
CCCAGTGAAG CCCACGTTTA TTGGGACCCA GGTCTTTGAA GACTATGACC TGCAGAAGCT      240
GGTGGACTAC ATTGACTGGA AGCCTTTCTT TGATGTCTGG CAGCTCCGGG GCAACCCCA      300
TCGAG      305

```

(2) INFORMATION FOR SEQ ID NO:643:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

```

GCGATTGAAT TCTAGACCTG CACCCAGCCA ACACTGAGAG ATTTTAATGA GTACTTTTAT      60
CCACCTGACC ACCATCATTG CCTATCACCT GTCATTCTTC ATCCACCCTA CATCCATCCT      120
TCATCCCCCC ATCATCCACC CATCTATCCT TCATCCATCC ATTCATCATG GAACCATTAT      180
CCATCCAACAT ATCATCCAGC CAGCCAGAAA TGACCCATTG ATCTTCATCT CTCATTTCCT      240
CTCTCTAAAC CAGTTCTTAA TCTGGGGCCA AAGTCCTACC CACACATCCC TTAGTCTCGA      300
G                                                                                   301

```

(2) INFORMATION FOR SEQ ID NO:644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```

GAATTCGGCC TTCATGGCCT AGATCCCCCG TGGAGAAAGC AGTGACACAT TCACACAGCT      60
GTTCCCTCGC ATGTTATTTT ATGAACATGA CCTGTTTTTC TGCACTAGAC ACACAGAGTG      120
GAACAGCCGT ATGCTTAAAG TACATGGGCC AGTGGGACTG GAAGTGACCT GTACAAGTGA      180
TGCAAGGAGG GGTTCACAAG AAAAAGGATT TTGTTTAAAA TACTTTAAAA ATGTTATTTT      240
CTGCATCCCT TGGCTGTGAT GCCCCTCTCC CGATTTCCCA GGGGCTCTGG GAGGGACCCT      300
TCTAAGAAGA TTGGGCAGTG GGGTTTCTGG CTTGAGATGA ATCCAAGCAG CAGAATGAGC      360
CAGGAGTAGC AGGAGATGGG CAAAGAAAAC TGGGGTGCAC GCCTCGAG                      408

```

(2) INFORMATION FOR SEQ ID NO:645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```

GAATTCGGCC TTCATGGCCT AGTTATGTGA TTAGGAGTAG GGTAGGATG ANTGGGAAGA      60
AGAAAGAGAG GAAGTAAAGT TTAATTATGC CTTTTTGGGT TTATTATCCC TGATGCATGT      120
GGCCCCCCAC TGCTGTGTCC TTCTCCTGTT GGCTAGGGTT AGACCACACA GGCTAAACTA      180
ATTCCGATTG GCTAATTTAA AGAGAATGAC GAGGTAAGTG TTTTGGCGGG AAAAATGGTT      240
ATGACAGAGC AGGTAATAGG AATGAGTTAG GGTGGAGTAG GTAATCGGAA TGAGTCAGGG      300
TGGAGCAGGT AATTGGAATG AGTCAGGGTA GAGCAGGTAA TCGAAAAGG TTGCTTTGCT      360
CGAG                                                                                   364

```

(2) INFORMATION FOR SEQ ID NO:646:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

```

GAATTCGGCC TTCATGGCCT AGGAGTGCAT TTGGATCTAG TGTCTTCTAT CAATCTGTCT      60
GCTGATGTGG CACTACTGCA CCATTACCA CAACATTAGA ATATGTCTGA GTAACGGTT      120
GGCTTAGATT TTTTGCATG AGTCCACCC CATTTCAG AACTTTCATG GCTATTCTTA      180
TATGTTTGT TTCCGTAAGA TCTTAGGAT CAATTGTCT AGTTCTAAAG AGGAAATCT      240
GATATTATTG ATTTAGTAAC TTTCCATGAA AAAAACCTAC CATCACAGGA AAGATGCACA      300
TTAATTACAG GTAGCTCGAG                                     320

```

(2) INFORMATION FOR SEQ ID NO:647:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

```

GAATTCGGCC TTCATGGCCT AGTCAGTGGC TAGATTGATT GATCCTCCAG AATTAGACAC      60
TCACATGTTA ACACCACTCT CAGTTGGAGG GCTGATAGTA AACCTTATTG GTATCTGTGC      120
CTTTAGCCAT GCCCATAGCC ATGCCCATGG AGCTTCTCAA GGAAGCTGTC ACTCATCTGA      180
TCACAGCCAT TCACACCATA TGCATGGACA CAGTGACCAT GGGCATGGTC ACAGCCACGG      240
ATCTGCGGGT GGAGGCGAGG TCTCGAG                                     267

```

(2) INFORMATION FOR SEQ ID NO:648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

```

GAATTCGGCT TCATGGCTAC TTTTGGTAAA GCATACCCAA CCTTCAGTTA GAATATCTCC      60
TGATAATAAG AAAGATCTCA TTGAAATTTA TTAATTCTTT TGTGTCTAGT AGATAACTTG      120
GATGGCACAC AGTGCTTTGA TTTTACCTG CCCAGAATTI AACTCCTCAT CCTATCCTAC      180
ATGATTTTCT TTTTCTCTC CCCCTTCTC TTTTATTCCA TGCTACTGGG AATGGCAGGT      240
CTTGACCAA GTAATGGCAG GTCTTGACC AAGCAAGCCA GAAACCTGAG CTTTAGTCTT      300
TATTCCTCCC CACTTCTGGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:649:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 559 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

```

GAATTCGGCC TTCATGGCCT AGAGGAAGTG AACGGATGGG GCCTCATCCT CCTGCCTCCC      60
TAAAGGGTGA GGGTGGAAAG ATGGGGCTGT GCCCTCTTAG GGCAGGGAAA AACAGCTTGG      120
AGGGGTTTCT GCCATCAGAG ATCCCATAGG AGGCAGGTCA GTCCTGCAGA ATTTCTCCCC      180

```



```

AGTCTGGCCT CCAGCCTCCC TGGCCCTTT CTAGAGGCCT CCATCCCACT GGCGGCTTGC 240
TCCTGCCACC GGGCCTCTGC ACAGTCACCT CCTGCAGCCT GGGGTGTGTC GCCTCTCCAC 300
GTCTTGATAT TTTTGCTGGA ATGCAGACGA TACTATATTT ACCGTATAAT ATATTATCAG 360
CTCTCCTATA TCTCAGTCAA TTACATAGT TTAATAAGTA ACATCTTATT AAAACATCT 420
AGATATACAC AGATTAGGAA ACGCTTACAA CATAAAATA CACAACTAG AAATAATCT 480
TTAGCATACT GGTATATACA ACAGTGTGAT ACAATAAATA ATTTTCATTCA TGCTCTATCT 540
ACACATCATA TTGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:650:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

```

GAATTCGGCC TTCATGGCCT AGGGAGACTG AGGCAGGCAG ATCACCTGGG GTCGGGAGTT 60
CGAGACCAGC CTGACCAGCA GGGAGAAACC CCGTCTCTAC TAAGAATAGA AAATTAGGTG 120
TGGCGTGCA TGCCTGTGGT CCCAGCTACT CGGGAGGCTG AGGTAGGAGA ATCGCTTGAA 180
CCCGGGAGGC GGAGGTCATG GTGGGCGGGG ATGCAACCAT TGCACTCCAG CCTGGGCAAC 240
AAGAGTGAAA CTCCATCTCA AAAAAATAAA AGCCTAGCCT CCCAAAGTGC CAGGATTACA 300
GGCATGAGCC ACCGCGCCTG TCTGTCCGCC CGTCTTCTTT TTTAAGAGCA AGAAAAGGTT 360
TCCGAGAAGT ACTCTGGTAG ATTCTTATCA CACACACATT CCTAAACCAG TTACTGGCAA 420
AGAAAATAGA ATTATCATGA TTAATTAGCA TATTCTGAAG NACATGCTTC CCTCGAG 477

```

(2) INFORMATION FOR SEQ ID NO:651:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

```

GTGTGAACCT ACGGGAAGGC GGCCGCTGTC ACCTCTGTGC GGAGACCAAG GATGATGCCC 60
TAGCATGGAA GACAGCACTG CTGGAGGCAA ACTCCACCCC GGTGCGCGTC TACAGCCCGT 120
ACCAAGACTA CTACGAGGTG GTGCCCCCA ATGCACACGA GGCCACGTAT GTCCGCAGCT 180
ACTACGGACC GCCCTACGCA GGCCCTGGCG TGACGCACGT GATAGTGGCG GAGGATCCCT 240
GCTACAGCGC CGGCGCCCCT CTGGCCATGG GCATGCTTGC GGGAGCCGCC ACTGGGGCGG 300
CGCTGGGCTC GCTCATGTGG TCGCCCTGCT GGTCTTGAGC CCTGGGACTC GGAGCACTGA 360
CCCCTGCGCT TGGATTGCTA GACTCCTCTT CCTCCTGGAC CCCATCCTCT CGAG 414

```

(2) INFORMATION FOR SEQ ID NO:652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```

GAAGGAAAAC ATGGGCACAG GGGATTTTAT CTGCATTTC ATGACTGGAG GGGCGCCCTG      60
GGGGTTCAGA TTGCAAGGTG GCAAGGAGCA GAAGCAGCCC TTACAAGTTG CAAAGATTCTG      120
AAATCAGAGC AAAGCCTCTG GGTCTGGGCT CTGTGAGGGA GATGAAGTGG TTTCCATCAA      180
TGGCAACCCCT TGTGCAGATC TCACCTACCC TGAAGTCATC AAGCTCATGG AAAGCATAAC      240
AGACTCTCTC CAAATGCTCA TCAAAAGACC ATCCAGTGGG ATAAGTGAGG CTTTGATATC      300
TGAAAATGAA AACTCTAACC TCGAG                                     325

```

(2) INFORMATION FOR SEQ ID NO:653:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```

GAATTCGGCC TTCATGGCCT AGGTATTTAG GCTTTTGTCT TAACAGCAAA TCCTGGCTGT      60
CTGGGGCCTG ATGACTGTGT TCCATGGGTA TCCACTCCCT GTCCACAGTG TGGGAGCCCC      120
TCAGCTGCTT ATTGCAGGGA CACAGAGCCC GGCATGGTCC AGAAGGCGGG CTTATGGGGC      180
CTGCAGCACA CAGGGAAAGT GAGCCACAC TGTGATAGGA GGGCAGACAC ACAGGATGTG      240
TTCGTGTGTTA CAGGGTTGCC GTGAAGAATT TCATTCTTTT GCAAGGACTG GAGAGAAAAT      300
TTTATGTGGA AGGTAGCCCT TGGAAATGAC CTCAAAGAAT AGGTAGGATC TTAGCCTCGG      360
TTTGAAAGCC TGGAAAAAAA CAGGATGACA GGATGAAGAG GCCACAGCAC AGCTGCAGAC      420
AATGGGAGTG CGGAGATCTC GAG                                     443

```

(2) INFORMATION FOR SEQ ID NO:654:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```

GGGAGCGCCG GTGGTTCATC CTGACCGATA ACTGCCTCTA TTACTTTGAA TACACAACAG      60
ATAAGGAGCC CAGGGGAATC ATCCCGTTGG AAAACCTCAG CATCAGGGAG GTGGAGGACC      120
CCCGGAAACC CAACTGTTTT GAGCTCTACA ATCCCAGCCA CAAAGGGCAG GTCATCAAGG      180
CCTGTAAGAC GGAGGCCGAC GGCNGCGTGG TAGAGGGGAA CCATGTGGTG TACCGGATCT      240
CAGCCCCGAG CCCGGAGGAG AAGGAGGAGT GGATGAAATC CATCAAAGCC AGTATCAGCA      300
GATCCCTCGA G                                     311

```

(2) INFORMATION FOR SEQ ID NO:655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```

GGGGGATACG GATACCCAAA CTTCAATGTT CCTTGATAGT AGGAAGGAGG ACAGTTATAT      60
AGACCATAAG GTGCCTTGCA CAGATTCAAC AGTGCAGGTC AAGTTGGAGG ACCACAAAAA      120
AGTAACTGCC TGCTTGCCCTG TGAACATGT TAATCAGCTG ACTACTGAGC CAGCTACAGG      180
GCCCTTTTCT GAAACTCAGT CATCTTTAAG GGATTCTGAG GAGGAAGTAG ATGTGGTGGG      240
AGATAGCAGT GCCTCAAAAG AGCAGTGTAAG AGAAAACACC AATAACGAAC TGGACACAAG      300
TCTTGAGAGT ATGCCAGCCT CCGGAGAACC TGAACCATCT CTCGAG                          346

```

(2) INFORMATION FOR SEQ ID NO:656:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 116 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```

GAATTCGGCC AAAGAGGCCT ACTAAACCGT CGATTGAATT CTCGAGGCAG GTCTAGAATT      60
CAATCGACGG TTAGGCTCC CTATAGTGAG TCGTATTAAT TTCAGAGGTG TATTTA          116

```

(2) INFORMATION FOR SEQ ID NO:657:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 482 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

```

GAATTCGGCC AAAGAGGCCT AGGGATGAGG GTGAAGAAGG GGAGAGGGTT GGTTAGAGAT      60
ACAGTGTGGG TGGTGGGGGT GGTAGGAAAT GCAGGTTGAA GGAATTCTC TGGGGCTTTG      120
GGGAATTTAG TCGTGGGTG AGCCAAGAAA ATACTAATTA ATAATAGTAA GTTGTAGTG      180
TTGGTTAAGT TGTGCTNGG AAGTGAGAAG TTGCTTAGAA ACTTTCCAAA GTGCTTAGAA      240
CTTTAAGTGC AAACAGACAA ACTAACAAAC AAAAATTGTT TTGCTTTGCT ACAAGGTGGG      300
GAAGACTGAA GAAGTGTAA CTGAAAACAG GTGACACAGA GTCACCAATT TTCCGAGAAC      360
CAAAGGGAGG GGTGTGTGAT GCCATCTCAC AGGCAGGGGA AATGTCTTTA CCAGCTTCGG      420
TGGCTGGCAC GTGTTACCAG GCCGAGTGGG ATGACTATGT GCCCAAATG TACGAGCTCG      480
AG

```

(2) INFORMATION FOR SEQ ID NO:658:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 430 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

```

GAATTCGGCC AAAGAGGCCT AGTCGAGTCC CTTCTGTCCC AGTCGTTCTG GCCTCTGTG      60
CCACGCAACT CCAGCTTGTA CCATGCCGGT CAAAGGAGGT AGCAAGTGCA TCAAATACCT      120
GCTCTTCGGA TTAACTTCA TCTTCTGGCT CGCTGGCATT GCAGTGCTTG CTATTGGACT      180

```

```

ATGGCTCCGA TTCGACTCTC AGACCAAGAG CATCTTCGAG CAAGAGAATA ACCATTCCAG      240
TTTCTACACA GGAGTGTACA TTCTGATTGG AGCCGGGGCC CTCATGATGC TGGTTGGTTT      300
CCTGGGCTGC TGTGGAGCTG TACAAGAGTC CCAGTGCAATG CTGGGATTGT TCTTCGGGTT      360
CCTCTTGGTG ATATTCGCCA TTGAGATAGC CGCCGCCGTC TGGGGCTATA CCCACAAGAG      420
TCGAGTCGAG                                     430

```

(2) INFORMATION FOR SEQ ID NO:659:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

```

GAATTCGGCC TTCATGGCCT AAGAGTACAG AGATTTCAC TCACTTGTG CTAATGTTA      60
ATTNAAAGTA TATTGACACT AGTAAAGACA CTTTATTTA ATTGAGGTA TAAATGTCTA      120
CCTAAAATAG ACTATTTCCA TTGAGTCATA CATTTTAAAT GTGGTATATA TTCTTATATT      180
TCAGAAAATG ATAACCTATCA TAGAAATCTA ATACTCATT ATTGATTAA TAATTATTTT      240
TTTCTCAAA TTTGGAAATA TCTTTTCCTA TGTAATGGTC ATGTCTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:660:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

```

GAATTCGGCC TTCATGGCCT AGTCAGAACT CTTTGTGTCC CTGTTTTTGT GTCCATTCA      60
TGTACCTTGG CACTTTAAGG CTTGTCCTGC AAAATAAAAC ATTGCATCAT CACTTGTGAA      120
GGCAGAGCTT GGGAGTTTGC ACTGCTAAGA TGAGGATAGG AAAGAAATTT ATGCCGCAGG      180
GCCTTTGATG CTGCCCACTC ACCTGTCTGC ACAGCCAGGG CACGGCCAGC GGGAGTGGAG      240
AAGACGAGCG AGACCAAAAC CTTGCCGTGG GGAGGAGGGT GGCATAGCCA TTGATAAATC      300
GGGACTTGAA CTATCCCATC ACTCTAAAAA TATTTTATAT CTGATTACAA AAGTAATAGA      360
TGGCCAGGCA TGATGGCTCA TGCCTGTAAT CCCAACACTC CTCGAG      406

```

(2) INFORMATION FOR SEQ ID NO:661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

```

GAATTCGGCC TTCATGGCCT AGTGGAACCTG AAAACTCAGA GGAGGCATCA AACCAGGCT      60
TGGGGGACAA AACTAAGTCT TGCCAGAGTC CTGAAGGATG AACACAGTT AACCAAGCAA      120
GGGATACTGG AGGGCATGGA GGCTCTCTGG CCTGGAGTGC AGAGCATGGA GTGCTCAAAG      180

```

```

AGCTAGTTAG CTCTGCAAAG CTGAGTGTCA GGAATGTAAA GGGAGAGAAT AGGAGTGAGA      240
GAAGAGTCTG GCAAGGCAGA CAGGGAAGGC CTATATGCCT TGATGGAGAA CCACTGAAGG      300
ATTTAAAGAA GGAGAGGGTT AATTTTGTCC AATAGAAAGA TCACATTGTG TGTAGTGTGG      360
AGGATGGGTT GCAGAGAGAG AAGCTAGAGA CCAAAGATG AGACGGGAAC AGCTGCAAAT      420
TTCGAGAGCT CGTAAGATTA TGTATGGCTG GACCACTCGA G                                461

```

(2) INFORMATION FOR SEQ ID NO:662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

```

GAATTCGGCC TTCATGGCCT AGCCTGAGCT CAGGAGTTCA AGACCAGCCT GGGCAACACA      60
GTGAAACTCC ATCTCTACTA AAATACATAA AAATTAGCTG GGCCTGGAGG CATGCACCTG      120
TGGTCCAGT GCTACTGGGG AGGCTGAGGC AGGAGAATTG CTTGGGCCCC GGAGGCAGAG      180
GTTGCAGTGA GCCAAGATCG CGCCACTGCA CTCAGCCTG GGCAACAGAG CGAGACTCCA      240
TCTCAAACAA ACAACAACAA AAACAACAA ACAAAACAAC AGTTATTTTT TTCTCACCAT      300
TCTAAAGAAT GTTACATTTG ATTCTTTTTC AAAATTGGGT CAGTTTGTAT AGTCTTATTT      360
CTCCATACTT TCATTCCCCC TTTTATTTC TGTAATAAT TGAACTTTAT ATTCCCTATA      420
TGATAATTTT AATATCCAAA GTCATTGGTC ATATTCTCCA GTTCATGATT TCTGCTGAGT      480
TTGTGGTGCT GATTTTCTCG AG                                502

```

(2) INFORMATION FOR SEQ ID NO:663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

```

GAATTCGGCC TTCATGGCCT ACAACCACCA ACATTTGTGT TTTGCAGAT GAACAGGTTG      60
ACAGAAGTCC CACTGGCTCA GGAGTGACAG CCCGAATTGC CTTACAGTAT CACAAAGGGC      120
TTCTGGAAC TGAACAGATG AGAGCCTTCA AAAGCAGTGC AACTGGCTCA GTATTCACAG      180
GGAAAGCTGT GAGGGTAAGT GGCACCCTTA GCTTCTTATT TATAAATGTG TCACTCATGA      240
GACTGGAGAG GCCTGAGTTG GGTGTTGAT AAATTTCTTC ACTCAGCTCT CAGAAGAGAA      300
TTTTAAAGCA GGCCTGTAAA AACTTCTTTT CAACTAGGAC ATTGGTTATC CAGTGTGGTC      360
TTGGGGCCCC AGCGGGCCCC TAAGGTCCTT TCCATGGGTT CAGAGGGTCA AAACGTGTT      420
CATAATAATG ACATTATTG CTTTCACTC TCATTCTCTC AAGAGTGAC AGTGGGTAC      480
TCGAG                                485

```

(2) INFORMATION FOR SEQ ID NO:664:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

GAATTCGGCC	TTCATGGCCT	AAAAATTATA	AAGTGTAATA	TATCTTTGTA	TCTCTAGTTT	60
TTCTCCTTTC	CCCAGATAAG	AATAAAAGCA	GGCTGCAGGC	TCCTGGGGTG	ATAACCCACT	120
TGGGTCGAGT	TCCATCGCTG	TTGGCGATAA	ATCTTGTTGG	TGTTCACTTT	TTGGGTTCTC	180
ACTACCTTTA	TGAGCTATAA	CACTCACCT	GAAGGTCTGC	AGCTTCACTC	CTGAAGCCAG	240
CGAGAGTACG	AACCCACAGG	CAGGAAGAAA	CTCTGAACAC	ATCCGAACAT	TGGAAAGAAC	300
AAACTCCAAA	CAAGCCGCTT	TTAAGAACTG	TAACACTCAC	AACTCGAG		348

(2) INFORMATION FOR SEQ ID NO:665:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

GAATTCGGCC	TTCATGGCCT	AGTCGTTATC	AGAGGTGGAG	ACATTTAGAA	GTGTTCCTTA	60
ATCAGAGTGA	AGCTTGTGCT	TCGGAAAGTC	AACCTCACTC	CTCAGCACTC	ACAGCACCTA	120
GCTCTCCAGG	TTCTCATGG	ATGAAGAAGG	ACCAGCCAC	ATTTACCCTC	CGACAAGTTG	180
GCATAATATG	TGAGCGCCTC	TTAAAAGACT	ATGAAGATAA	AATTCGGGAG	GAGTATGAGC	240
AAATCCTCAA	TACCAAACTA	GCAGAACAA	ATGAATCTTT	TGTGAAATTC	ACACATGATC	300
AGATTATGCG	ACGGTATGGG	ACAAGGCCAA	CAAGCTATGT	GTCATGAAGC	TTTGTACAT	360
ATCTGGGTAC	CAGGTTTGAC	CTCAAGAGAT	GGCTGCTGTA	CACTTTTTC	AACTGGTTTG	420
ATGTCACATT	TCAGCTCCAA	CTTTGCATCC	TGAGAACACT	TAAACGTTTC	TGCAGGTCCA	480
TTTTATACAA	CTTGAAAGAC	CGTAAACTT	TCGTGTTGCC	ACAAGCATAT	CTTTCTTTTC	540
TGCTCATCCA	ATAAACAGCT	GAGCCCTCGA	G			571

(2) INFORMATION FOR SEQ ID NO:666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

GGGATCATT	TTATTCAGCT	ACTGAGAACT	AGAATATTAA	GAGACTGCTG	GCAAGGCAAG	60
CAGTTAATTT	TCAGTTGAAA	TGTCATTAAA	TAAAAAGTAT	TTTCTTGCTT	TGTGGAAGCA	120
CGTGAATTTT	TGTA AAAAGC	TGCTTGTTTT	CCCCATTTAC	AGGTTCTGTA	CAGAGTAATG	180
AGATGTGTGA	CGGCTGCAAA	CCAGGTGTTT	TTTTCTGAGG	CTGTGTTGAC	AGCTGCTAAT	240
GAGTGTGTTG	GTGTTTTGCT	CGGCAGCTTG	AATCCTAGCA	TGACTATACA	TTGTGACATG	300
GTCATTACAT	ATGGATTAGA	CCAACTGGAG	AATTGCCAGA	CTTGTGGTAC	CAATTATATC	360
ATCTCAGTCT	TGAATTTACT	CACGCTGGTA	TGTGAATTAT	TCTTTTCCTT	TTTAATGTGT	420
TGTTTTATT	AGGCCCATCT	CGAG				444

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 524 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

```

GGGAACTGAC AAGCAATTAA CTGGAGAATA AGTGAGGGGA ATGGAGCAGT AGTATTCTTT      60
AACTTAATTT GCCATTTAAG AGAGCACTTG GAATCTGAAG AAAGTCTATC CCTACCAAGG      120
AAACGGAGTC AAATTGCAAT TAAGATTAACT TTTGGTTATA TGGAGCAAG AATCATGCTT      180
CTCATCATCA ATTGCGTCTC TTTGGTAGCC AATAATTCCA TCTGTAATCA TGGCAGCAAC      240
TTAAGTATTG CCAATGTTTT CAAATGTGTT ACAGCATTAA GGCATCCACA TCTAAAGAGG      300
CAGTTTTAAA CAAGAGGAAA ACGGAACTGA AATGTGCCAA GAAGTGAACA CGGACATGGC      360
CTCTCCTGGA ATACTGCCCA CCATGCCAGC AAGCTCTTCC TCCAGTCAAG AAGGCCTGTG      420
CCACGCTGCT TGGTTCCTCG CTGCCTGAAG ATGCATTGGA GCCCTATGAG ATTAGTATGG      480
CTATTTCTGT CTGCTGACCA GGAGAGAAAT GAGTAGTTCT CGAG                          524

```

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 554 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

```

GAATTCGGCC AAAGAGGCCT ACACAGAGGG ATAATTGGCA TTGGTATCAA CTGACATATT      60
CACAACTTTG AATAAAACTT TCCACATTTG GAAAATCACC ATGCCTGGCC CCTAGGCTAT      120
ACTTTGAAAA CCACTGCTTT AGTGTTTITAG AAATTGTTAC CCTCATACTA ATATTTACTA      180
CACCCCCCAC CTTGACAATA CATACAAAAG AGGAGTAACA GTTCCCATTA ACCTTTCTAA      240
ATTGAGTCT TATTAAACCA GACTCATAGC CCTTGTGAC TTTTCTTCTT GATCTGTGCC      300
TTATCCCTAG GCGCGTGATC ATGCGGGTAT CTGCTAATTG GCAGATGTGA GTGTTTATAC      360
CTATTTACAA GCAACTCATT GCAAAAATAA TTTTAGCTAA AGAAAACATC CATGGCCAGA      420
GAATAAGTTT TGGAAATTTG TATGTTAAAT GAGCTTTATG TTTACCTTTA AAAGGTTAAA      480
ATATTTACCA TTCATGGATT ACCTTTTTTC AGAAAGTAAG AATATATAAA TTACATTTAA      540
TCTTGAAGCT CGAG                          554

```

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

```

GAATTCGGCC TTCATGGCCT AATCGTATTC CATCTACTGC ATACTTTTCA TAGATGTCCT      60
CCATCAGAAG CACCTATGGT TGTTTGTTAA ACGTGTTATT TCCTGATCCC ACCCCAGGAT      120
TTCTGAGTAT TCTAAGAAAT TCTAAGTGTA AGGCCTGGAA ATATGCATT TACAACCCCC      180
TAGAACATT CTTATGTGCAC TAAAAATTGA GAACCACTAA TCTGGTGTAT ATACTGTTGT      240
TACTTAATAT TTTCTTAATG ATAGATACTT GGATGATTTT TGACTTTATT ATTATTATAA      300
GCAATGTTGT AAACATCACA CAGGCCAAG                          329

```

(2) INFORMATION FOR SEQ ID NO:670:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 267 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

```
GGCGTATGAT ACCTAAAGTG GAGTGGTCGG CGTTCCTGGA GCGGCCCGAT AACTTGCGTC      60
TGATCCAGGT GCCGAAAGGG CCGGTTGAGG GATATGAGGA GAATGAGGAG TTTCTGAGGA      120
CCATGCACCA CCTGCTGCTG GAGGTGGAAG TGATAGAGGG CACCCTGCAG TGCCCGGAAT      180
CTGGACGTAT GTTCCCATC AGCCGCGGGA TCCCAACAT GCTGCTGAGT GAAGAGGAAA      240
CTGAGAGTTG ATTGCACCAG ACTCGAG                                         267
```

(2) INFORMATION FOR SEQ ID NO:671:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 429 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

```
GAATTCGGCC TTCATGGCCT ATTATCTCTC AAAAACAAAG CAATAAGTAC CAAGAAATAG      60
CAACAAAAAT TAGCTTGTA GGTGTTTTC TGAGGGTAGA AATGGCTCTT GATGCCATGT      120
GGAGCAATGG GAAGGAGGCT TTCTAGTTAC ACAGACTCTT GGTCCTGCCA CTTATTCATT      180
TTATTTTATT TTATATTTTA CTTTAAATTT TTTGAGATAG GGTTCACCC TGTCGCCCAG      240
GCTGGTGGGC AGTGGCTCAC TGCAGCTCG AACTACCAGG CTGAAGTGAT GCTCTTACCT      300
CAGCCTTTTC AGTAGTTGGG ACAACAGGTG CACACCACCA TTCCTGGCTA ATTAACAAAAA      360
TTTTTTTGTG GGAACATGGC AAGACCTTGT CTCTATTAAC AACACAGCA ACAGCAACAA      420
CAACTCGAG                                         429
```

(2) INFORMATION FOR SEQ ID NO:672:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 357 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

```
GTAAATCGT TCTTGAGAGG AACGTCTCTG TGCGAAGAGA TAATGAGTTT AGCTCTGAGA      60
AGTGAGCTTG TAGTGGACAA AACAAAGAGG AAAAAAGAA GAGAACTGTC TGAGGAACAG      120
AAACAAGAAA TTAAAGATGC TTTTGAAC TAATGATACAG ACAAGATGA AGCAATAGAT      180
TATCATGAAT TAAAGGTGGC AATGAGAGCC TTGGGGTTTG ATGTAAAAAA AGCTGATGTA      240
CTGAAGATTC TTAAAGATTA TGACAGAGAA GCCACAGGGA AAATCACCTT TGAAGATTTT      300
AATGAAGTTG TGACAGACTG GATATTGGAA AGAGATCCCC ATGAAGAAAT ACTCGAG      357
```

(2) INFORMATION FOR SEQ ID NO:673:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

```
GGTAGATACT GGTTTTTCGT ATCCTGCTTC TCTTAAGGGC AGCTCTTTT AGCATACTCC      60
CATGCAGCAA CAGAAATTG TATCTTTTT TTCTTTTGTG AGATGGAGTC TCGCTCTATC      120
ACTAGGCTGG AGTGCACTGG CACAATCTCG GCTCACTGCA ACCTCTGCCT CCTGGTTCAA      180
GCGATTCTCC TGCCCTAGCC TCCTGAGTAC CTGGGACTAC AGGTGCGCGC CACCACACCC      240
AGCTAATTTT TATATTTTGA GTAGAGACGG GGTTTTACCA TGTGGCCTCG AG          292
```

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 470 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

```
GGATGGACAT CAGCACTTTA CGGCGCCAGC TGAGACCCAC AGGCCAGCTC CGTGGAGGGC      60
TCAAGGGCTC CAAGAGTGAG GATTCGGAGC TGCCCCCGCA GACGGCCTCC GAGGCTCCCA      120
GTGAGGGGTC TAGGAGAAGC TCATCCGACC TCATCACCTC CCCAGCCACC ACTCCCCCAT      180
GTCCACCAA GAAGGAATGG GAAGGGCCAG CCACCTCGTA CATGACATGC AGCGCCTACC      240
AGAAGGTCCA GGAAGTGGAG ATCAGCTTCC CCGCGGGCGT GGAGGTGCAG GTGCTGGAGA      300
AGCAGGAGAG CGGGTGGTGG TATGTGAGGT TTGGGGAGCT GGAGGGCTGG GCCCCTTCCC      360
ACTATTTGGT GCTGGATGAG AACGAGCAAC CTGACCCCTC TGGCAAAGAG CTGGACACAG      420
TGCCCGCCAA GGGCAGGCAG AACGAAGCA AGTCAGACAT CCAACTCGAG          470
```

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 637 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

```
GAATTCGGCC AAAGAGGCCT AGTCGCTCTT GCTGAAACCT TCAATGCAGT GAGCGCCCAT      60
CTCATTGGGA CCTACAGGCT GAAGTTCTTC CTCTGATGGA CATGACCCCC GTGTTGTCTC      120
TAATAACCTC ACTTTCACTC TGTTCAGCC ACACGGGGTT TCTGTCTTTC TCGGGTCATG      180
TCGGGCTTAT GTGCCTCGGG CCCTTTGCTC ATGCTGTCTC CTGCCTGGGA TGCGCTTTAC      240
TGGGTGCCAG GATGGTCAGT GATTCCATTT CTCTCAGAGT CTATTCACAG GTCCCTTTCT      300
CGGTCACGCC TTCTCTGGCT CCACTGTCTA AAATTTCAAC AGCTGCCTCT GCCCCCCGAA      360
CTTCATATCC CCCTTATCTG CCTTTTTTCC TTCAGCTCTT ACTTCCATCA AATACAGTAT      420
GTATTTTAA AAGTCTTATC TTGTTACGG TCATTTTCTT CCACAGGTAA TTTTGGTAAA      480
CTTTGTAAGA TTGATGATGT TTAATACTGT TTTGTTTAA ACAGTACCCC CAGTTTAGCA      540
CACAGCTTTT GAATGAATGA CCAGTTTATA TTCCCTCTG AAGCGCTAAG AGCTGCCGCT      600
GAGGTGGCAT CTGTAGCNGC TCCGCTCCA ACTCGAG          637
```

(2) INFORMATION FOR SEQ ID NO:676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 513 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

```

GAACACGTCA TGAGGAAGGA GCAGCGCAAG GAGGAGAAGG AGAAGCGGCG CCTCGACCAG      60
CTGGAACGTA AGAAGGAGAC GCAGCGCCTA CTGGAGGAGG AGGACTCCAA GCTCAAGGGC      120
GGCAAGGCGC CGCGGGTGGC CACGTCCAGC AAGGTCACCC GGGCCCAGAT CGAGGACACG      180
CTGCGCCGAG ACCATCAGCT CAGGGAGGCC CCGGACACAG CCGAGAAAGC CAAGAGCCAT      240
CTGGAGGTGC CGCTGGAGGA GAACGTGAAC CGCCGCGTGC TGGAGGAGGG CAGCGTGGAG      300
GCGCGCACCA TCGAGGACGC CATTGCAGTG CTCAGCGTGG CGGAGGAGGC GGCCGACCGG      360
CACCCAGAAA GACGCATGCG GGCAGCCTTC ACAGCCTTTG AGGAAGCCCA GCTGCCCGGG      420
CTCAAACAAG AGAACCCCAA CATGCGGCTG TCGCAGCTGA AACAGTGCT CAAGAAGGAG      480
TGGCTCCGCT CTCCTGACAA CCCCAACTC GAG                                     513

```

(2) INFORMATION FOR SEQ ID NO:677:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

```

GTCCATCCTG AGCTCCATGG AGAAGCCACC CAGCCTCGGT GACCAGGAGA CTCGGCGCAA      60
GGCCCGAGAA CAGGCCGCCC GCCTGAAGAA ACTACAAGAG CAAGAGAAAC AACAGAAAGT      120
GGAGTTTCGT AAAAGGATGG AGAAGGAGGT GTCAGATTTC ATTCAAGACA GTGGGCAGAT      180
CAAGAAAAAG TTTCAGCCAA TGAACAAGAT CGAGAGGAGC ATACTACATG ATGTGGTGGG      240
AGTGGCTGGC CTGACATCCT TCTCCTTTGG GGAAGATGAT GACTGTCGCT ATGTCATGAT      300
CTTCAAAAAG GAGTTTGAC CCTCAGATGA AGAGCTAGAC TCTTACCGTC GTGGAGAGGA      360
ATGGGCCCCC CTCGAG                                     376

```

(2) INFORMATION FOR SEQ ID NO:678:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

```

GAATTCGGCC TTCATGCCTA GCAGGAGGTT TTATTGTAAA GAGGCCGATT GTACAGAGCA      60
AAGATTGTTT TGACACGGGG GGCTGGGTGG TGGGACCCAG AGGCCAGAGC TGGGTGAAGG      120
ATGAGGGGTG GCATCGCCCC ATCCAGGCAG TGGGCAGGGC AGGGAGGACT AAACGGCTGC      180
CTCCCAGTTC CCTTCCCTGC CCTCATTAC TGGGTAAGAG GGAGCCAGGC TATTTCCACG      240
GATCCAGGAG AATATAGCAG GAGACCCTCA CCACCCACA CCATGCCCA AGGATACGGG      300

```

AGGTGCCCCA GTCTGGCTTT TGCAGTCGGC CAGCTCCCAG CCTCCTCGAG

350

(2) INFORMATION FOR SEQ ID NO:679:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

GAATTCGGCC	TTTCATGGCCT	AGTTCTCACC	GGGGAAAAAC	CCACTGTTAG	GATGGCATGA	60
ACATTTCCTT	AGATCGTGGT	CAGCTCCGAG	GAATGTGGCG	TCCAGGCTCT	TTGAGAGCCA	120
TGGGCTGCAC	CCGGCCGTAG	GCTAGTGTA	CTCGCATCCC	ATTGCAGTGC	CGTTTCTTGA	180
CTGTGTGCT	GTCTCTTA	TTAACCGTGC	TGAGGCTCCA	CATAGCTCCT	GGACCTGTGT	240
CTAGTACATA	CTGAAGCGAT	GGTCAGAGTG	TGTAGAGTGA	AGTTGCTGTG	CCCACATTGT	300
TTGAACTCGC	GTACCCCGTA	GATACATTGT	GCAACGTTCT	TCTGTTATT	CCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:680:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

GGGGGTGAA	GGCGTAGTGC	TTGAAATGCA	GGGATCTGGC	AGTCAGCAGA	AGGATCTGAG	60
ACCCAGTGTC	GAGGTTAAAA	AAAAAACAAA	AAACCAAAAA	CCAATGCAGG	AATCCAGTGG	120
GTGGAGTGAG	GGGATCTGGG	ATCCAGTGAT	GGGGCCCCCA	GGATCCAGGC	ATTGTGGTTG	180
TCAGGATCCA	GTGGTGAGGT	TTGTTGACAT	CCAGAATCCA	GCAGCTGAGC	TTGGAGATCC	240
AGGGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:681:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

GGATTCTTAC	AAAAATTGAG	GCAGAAGATC	AAAATCGGAG	TGGTAGGCGG	ATCGGACTTT	60
GAGAAAGTGC	AGGAGCAACT	GGGAAATGAT	GAATATTCAA	AGTCATCTGG	GTGAGGCCCT	120
AATCCAAGAT	TTAATCAACT	ACTGTCTGAG	CTACATTGCG	AAAATTAAAC	TCCCGAAGAA	180
GAGGGGTACT	TTCATTGAAT	TCCGAAATGG	GATGTTAAAC	GTGTCCCTTA	TTGGAAGAAG	240
CTGCAGCCAA	GAAGAACGCA	TTGAGTTCTA	CGAACTCGAT	AAAAAAGAAA	ATATAAGACA	300
AAAGTTTGTA	GCAGATCTAC	GGAAGAGTT	TGCTGGAAAA	GGCCTCACGT	TTTCCATAGG	360
AGGCCAGATC	AGCTTTGATG	TCITTCCTGA	TGGATGAAAA	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

```

GAATTCGGCC TTCATGGCCT ACCCTTCTAG GTGTCATCTC CTTCCCTCCC TTTCCCCCAA      60
GACTCCCTCT GGGCCCAGCC AGCAGGTGAA GCCTGACTTA GGAAGGGGG GATTTCAGG      120
GGAGGGGGCC TGGCCCCCAG TGACCCAGCA TTGCTATCCA CAGGAGGAGC AGCCCCACA      180
ACATCGATCC AAGAGGGGGG GCTCAGTGGG CGGCGTGTGC TACCTGTGCA TGGGCATGGT      240
CGTGCTGCTC ATGGGCCTCG TGTTGCCTC TGTCTACATC TACAGATACT TCTTCCTTGC      300
GCAGCTGTCC CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```

GAATTCGGCC TTCATGGCCT AATTGAATC TAGACCTGCC TCGGCCTCCC AAAGTGCTGG      60
GATTACAGGT GTGAGCTAGC ACTCCAGCC GACAGGTGCT TCTTAAATGT TTTCTTTGAG      120
CAGGAATTGG TCCAGGAATT GGTCTCAAG TTAGAAGGAA AATTGAGGG GAAGAAGCTG      180
TTTTTTCTCC AATCAGTCTC TGATTAAATA GTTATTAGGA AAAACTCCTT GCTTATGTCT      240
TTGTATTGCA CATTTTATA TATGTATATA TGTGTAAATA GAGATATTTA TATATTGACA      300
GACAAACACG TGTATGCACA TTTCACAATG GAGGAAGAAG GGATATGGTG TGCCTGAGG      360
TAAAGTGAGC AGGATACAG AAGAGAACT CGAG                                     394

```

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```

GTCCTAACCT TGGGTCCAAG TTTGTTATA GTGGCAGGAC ACAAGCGCAA ACGAGAAGAG      60
CCAGTGCGTT GATAGATGCG CCAGCACCTT ACTTTGAACG CTCATCCAGC AAACGTTATA      120
CCATGTCTCG CAGCTTGGAT GGAGCATCAG TGAATGAAAA CCATGAAATA TACATGAAGG      180
ATTCTATGTC TGCTGCAGAG GTTGGTACTG GCCAGTACGC CACAACAAAA GGCATCTCTC      240
AGACCAACTT GATCACCCTT GTGACTCCGG AGAAGAAGGC TGAGGAGGAG CGGGACGAGG      300
AAGAGGACAA ACGGAGGAAG GGGGAAGAAG TCACGCCCAT CTCGGCCATC CGGCACGAGG      360
GAAAGACTGA CAGTGAGCGC ACGGACACCG CAGCCGACGG GGAGACCACC GCCACTGAGT      420
CGGACCAGGA GGAAGATGCA GAGCTCAAGG CACAGGAGCT AGAAAAAACT CAAGATGACC      480

```

TGATGAAACA TCAAACCAAC ATTCTCGAG

509

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GAATTCGGCC TTCATGGCCT ACCAAAGTGC TAGGATTACA GGCCTGAGCC ACTGCGCCTG      60
GCCTCTTTCT TCTTTCTTGA ATTCTCTTCT TTTTATGTTC CTGGGAAAAT CCTACTCATT      120
TTATATGATT TGGCTGATGT AAAGCCACCA TTGTCTTCCT AAGCAGAGAG GGTCTTGCTT      180
TTGGGTGCTG CACAACCTTG TGCAATTTT CTGTTACATC ATTTATCTTT TGGGGATTGT      240
TTATTTTCAT ACTTATCTCT CTTCAGGAC CATGTTAGGG AGAGGTGTTT TTAATTTTAA      300
CCTTTTCTGC AGCACTTAGC ACAGTGCCTA ATCATAGTAA ATATCACGTA AAAGTTGAAT      360
GAAGGAATGG ATGTTTGATA TAGAGTTAGG ACACCTGTGT CCAGGTCTGG CTTTGCTTTT      420
CCTTTNACCC CCCACCTCGA G                                     441

```

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GAATTCGGCC TTCATGGCCT AGTTGGTTTA TGTATGTAA AGTTATGTAG TTATGTAAAG      60
GTGCTGAAAT GTCACTCTTG TGATTATGTT TTATTATATA AGGCTCTATC TTAGCAAACC      120
AGGAGAGAAA TTCTCCTGAT GGCCTTGAAG AAGCAAACAG CCACCTGGTT AAGCCCCTGT      180
GGATAGTGCC AAGTGGCAGG AAAGTGGGAG CCACCTCTAG GACCTGAGGA TTAAAGTCAG      240
TAAGAGCTGG GACCTCACTC ATGCAGACTC GAG                                     273

```

(2) INFORMATION FOR SEQ ID NO:687:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC AAAGAGGCCT AGGGCTCTGG ATTTTGAGTT TCGGGCTCTA GATGGAATTG      60
AGAAGGTCCA ACTTGCTCAG AGGGCCCTGG AGGCTCATCT GACTTCACCC GGATTTTCCT      120
CGAG                                     124

```

(2) INFORMATION FOR SEQ ID NO:688:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC AAAGAGGCCT ATGCCATCTT AGTCCCTCTT CCCAACCCCA TTTTITAGTT      60
ACTTTCCTTT CATTAAAATA TCCTTATGCA CTTACAAATA AACTAAGTC CCAAGAGGGC      120
AACAAAATAT AAGATTCTTA ATGATACAAA AACAAATCTT TCTGATACTA GATCTTTTAT      180
ACTAGAAAAA TAAATTCTTG TGCTTGAACA TCATTTTAA GCACCTTAGTG AATTGAGAAT      240
CTGAAC TGCC ACTTGAAATA TTCCCGGGAA AGAAACATTA TGAACCAAAT GAAGGAACAT      300
AGCTATTCAA AGGGACATAT TTTGTACTT GTTTTGCTCC AATTCTGCT ACATAGACTG      360
CTCCAGTCTT TCTGTCGACT CTAGGAGATG CCTAAACCGT CGATTGAATT CTAGACCTGC      420
CTCGAG                                         426

```

(2) INFORMATION FOR SEQ ID NO:689:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCGGCC AAAGAGGCCT ATAGTTTTT CATGTTACAT CTTTtagatt ATTTTCTTTT      60
TAATCTATCT GTGACTATAT TTAAAGTCAA TTCTTGTTTT TTCCTTTTCC TTTTGTGGG      120
TAACGGGGTC TCGCTGTGTT GCCCAGGCAG ATCTCAAACCT CCTGGGCTCA AGCTGTCTC      180
CCACCTCTGC CACCCTAGGC TCGAG                                         205

```

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```

GAATTCGGCC AAAGAGGCCT ACGTTGATTG AGCACTGAGC CCTTACTACG TGCTAGGCAT      60
GGTACATGCA TGGCCTTATT TAATCCTATC AACCCCTCGAG                                         100

```

(2) INFORMATION FOR SEQ ID NO:691:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```

GAATTCGGCC AAAGAGGCCT ACATCATACA AGTCGTCGTA AAGCAAATCT GAGCTGTTGT    60
CATTGGAAGG CACTTTAGTT TTGATGCAGT ATTCCGCCAG GGTGTGGGG ACCTTCACTC    120
CATCCTTTTC TGCTTCGGCC TTAGTGGCTG AAACCTGTTT CCTAATAAAT TCAGCATATT    180
CTTTGTCTTT TCCTTTACTG TCTCTCCATT TCCTGAACAT AACTGAAGCA TCGACATTGG    240
CTGGGGAGAA GGTGTGGGC TCATTAAGCA GTGAGATTAC ACTTAATAGG ATAGTCTCTG    300
AG                                                    302

```

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 662 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```

GAATTCGGCC AAAGAGGCCT ACCAAATACC AGGCTACCAT GGTCTACAAG ACTCTCTTCG    60
CTCTTTGCAT CTTAACTGCA GGATGGAGGG TACAGAGTCT GCCTACATCA GCTCCTTTGT    120
CTGTTTCTCT TCCGACAAAC ATGTACCAC CGACCACCAT CTGGACTAGC TCTCCACAAA    180
ACACTGATGC AGACACTGCC TCCCCTCCA ACGGCACTCA CAACAACCTG GTGCTCCAG    240
TTACAGCATC AGCCCCAACA TCTCTGCTTC CTAAGAACAT TTCCATAGAG TCCAGAGAAG    300
AGGAGATCAC CAGCCCAGGT TCGAATTGGG AAGGCACAAA CACAGACCCC TCACCTTCTG    360
GGTTCTCGTC AACAAAGCGT GGAGTCCACT TAACAACCAC GTTGGAGGAA CACAGCTCGG    420
GCACTCCTGA AGCAGGCGTG GCAGCTACAC TGTGCGAGTC CGCTGCTGAG CCTCCACAC    480
TCATCTCCCC TCAAGCTCCA GCCTCATCAC CCTCATCCCT ATCAACCTCA CCACCTGAGG    540
TCTTTTCTGC CTCGTTACT ACCAACCATA GCTCCACTGT GACCAGCACC CAACCCACTG    600
GAGCTCCAAC TGCACCAGAG TCCCCGACAG AGGAGTCCAG CTCTGACCAC ACGACCCTCG    660
AG                                                    662

```

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```

GAATTCGGCC AAAGAGGCCT AAGCCCCAA AACACGCTCT TTTGTGCCTC CCCTCAAATC    60
CTTCACAGTG TTCTTCCATA TCCACTCCTT CCAGGAAGCA TGTTCTCACT ACCCCAGTTC    120
ATGTGGGTTT CTTCCCTCTC AGAATTTCTA TCATGCCCTT ATAAGTTTAG CAAATTGTCC    180
TTCTCTAATT GTTTCACATC TGTCCATCCG ATATCCCAGG AGGACTGTCA GCTCTATGAA    240
GGCAGGGGTT GTCTTTCCTT TACCATGCCT ACCATGCCTT ATAGTGTTAA TAAATTAACC    300
TACCCAGAAA TGTTTCTCGA G                                                    321

```

(2) INFORMATION FOR SEQ ID NO:694:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

```

GCGATTGAAT TCTAGACCTG CCTCAATCCC CTCCTACTT GCTTTTCTT AGCATATAAA      60
AGTCCACAAG TTTTACTCAT CTTTTTAAAA AACGAAAACA TCCTTAGACC GTGTCCTCCA      120
TTAGTTGCTA TCCTGCCTTC TTCTCTCAGC TGAGCTGTCT GAAACATGCT AACATGCTTA      180
TACAATACTT GCTGTCCTGC CTCTGCTCT CAGCTGAGCT CTCTGAAACA TGCTAACATG      240
CTTATACAAT ACTTGCTGTC CTGCCTTCTC CTCTCAGCTG AGCTCTCTGG AACATGCTTT      300
TTATACAATA CTTGCTGTCC TGCCTTCTT TCTCAGCTGA GCTCTCTGGA ACTCGAG       357

```

(2) INFORMATION FOR SEQ ID NO:695:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 225 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

```

GAATTCGGCC AAAGAGGCCT ATGGGTTTTT AAAAATTTTG TTTTATTTT TTCCTTGAT      60
GTGCAGAGGC TGTTTACTTT GATGCAGTCT CACTTGTTTA TATTTTATTT TGTTGCTGGC      120
CTAGGCCTCT TTGGCCGAAT TCGGCCAAAG AGGCCTAGTC GGGTGTGGCA GTGCCATTCT      180
GCAGTCCCAG CCACCGGGA GACCGAAGCG GGAGGATCAC TCGAG       225

```

(2) INFORMATION FOR SEQ ID NO:696:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 314 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

```

GAATTCGGCC AAAGAGGCCT ATCCGCTTCT GTTGCAGCTG GCGGTGCTCG GCGCGGCGCT      60
GGCGGCCGCA GCCCTCGTAC TGATTTCAT CGTTGCATTT ACAACTGCTA CAAAAATGCC      120
AGCACTCCAT CGACATGAAG AAGAGAAATT CTTCTAAAT GCCAAAGGCC AGAAAGAAAC      180
TTTACCCAGC ATGGGACTCA CCTACCAAC AACTTTCTGT CGTTGTGCCT TCAAACAATG      240
AAGAAAAACG GTTGCCGTG ATGATGGATG AAGCTCTGAG CTATGTAGAG AAGAGACAGA      300
AACGAGACCT CGAG       314

```

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 353 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

```

GAATTCGGCC TTCATGGCCT ACAGAGTGTG GACGGCCAC TGGGTGGTG GTGGTGGTG      60
CCCGTCACAG GGCTGGAGGT GTGGCCGCC CACTGGGTG TGCTTTCTGC CGTACGTCCC      120
TTCCCATGAG GATGAGATGA CCCATCTGTT GCATCCCGGC TGCTGATAAA ACAAGACCCT      180
CGGAGCCAAG AAACAACACT GAGTTCCAGA TTTCGGAAGG TTCACGAGTG TTGCCGACAC      240
GCCCTCCCAA CTGCAGACAT CCTCCCTGGA GGACCTGCTG TGCTCACATG CCCCCCTGTC      300
CAGCGAGGAC GACACCTCCC CGGGCTGTGC AGCCCCCTCC CAGGCCCTC GAG              353

```

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

```

GAATTCGGCC TTCATGGCCT AGATTGACAG AGGTCAGTTG TCACTTCTTG CCTCTCTCCC      60
CTTCCAGCAA CATGTATAAT CCTGTGAGTG TTTCTTCAGC ACCCTTCTCT GTTGTTTACA      120
CTACTGCAAG AGCCTCCCTA AGTGGTCTGC CTGTTTCCAC CCTGTGTCT TGGAATTTAG      180
TTTTCTCGCA AAAGCCAGAG AATGTTTTCA GAAGGTAGCT CTTGAGCAAC TTCCCACTTT      240
CTTGGAGGGG AGATCCAGCT TCCCAACAA GACCAGCAGG CCCCTGTGCG GCCTGGCTCC      300
TGTTACCCCT ACCAGTCTTG GCTCAGGCTC ACGGCTGGAA TATGCCGAGC TCTTTCTTGT      360
CCTGGGGCCT TTGCACTTGG CTTCCTCTG TCCAAAATCA TCTTCCTGTA GCTTTGTGCT      420
TGCTAGCTC ATCATCATAG CAGCTCGAG              449

```

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

```

GAATTCGGCC TTCATGGCCT ACAGAGAACT GAGGAAAACC AACTACGTGG AGAATCTCAA      60
AGAAAAAGC GAGGGAGAAG CTTCCTGTA TGAAGATAGA ATAATAACAA GAGAGAAGGA      120
CATGAGGAGA GTGAGAGATG AGCCCGAGAA GGTGGTGAAG CAGTGGGACC ATAGTGAGGA      180
TGAGAAAGAG ACAGATGAGG ACGATGAGGC TTTTGGGGAA GCTCTGCAGA GCCCAGCAAG      240
CGGAAAGCAG AGTGTGGAAG CAGGAAAAGC CAGAAGCGAT TTGGGAGCAG TTGCCAAGGG      300
CCTGTCAGGA GAATTAGGCA CAAGATCAAG AGGGCTCGAG              340

```

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

GAATTCGGCC	TTCATGGCCT	AAGCCAAGCA	AGGCTGTACC	TTTAATTACT	GCTGCCCTCA	60
TTTGCACTG	GCTGCCCTCA	TTATAGTGCT	ATTAGCAGAG	TGCAGGGGTC	CTCCTGCTGG	120
CCCATCGGA	GTGGTGCGTG	CACAGTTGTG	GGGCCTTGCT	TTGGTGGTCT	TTGCTGCCTT	180
CTGGGCAAAA	TGAAGGATTT	GGAGTAGACA	GCAAGCAGGC	ATACATCCTG	GGCCAGAAGC	240
AGCCTGCGGA	GCTCATCGTG	GCTTGCCTTA	AATTGTTTCT	CAACAATAAA	GTGTGTTGAAA	300
AACAATTGT	GTTTTCTTTC	TCCTTATTAA	AAACCCAAAA	TTATATTCAT	TATAGAAAAT	360
TAAAGAAGAT	AGCTCTCGAG					380

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

GAATTCGGCC	TTCATGGCCT	AATTGAATTC	TAGACCTGCC	TCAGCCTCCC	AAAGTGCTGG	60
GATTATAGGC	GTGAGCCACC	GCGCCAGCC	GAAAATCTAA	AGATATTGAA	AAGATACAAA	120
GGAGCACATT	ATGAACATTT	TTTTCGTATC	ACTGAGTATT	TTATAACTGC	ATCATTGATT	180
TTAAAAGAAT	TCATGACTTT	GAAAACTAAT	ATTCTACAAA	GTAGCTTTTG	ATTTAACATG	240
AGATTTTATA	TATGTGCTTA	TCTTGTTTCT	CTATGAAACC	CCATTGAAAT	AAGAAAATGT	300
AAACACCAGC	CAACTCGAG					319

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 549 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

GAATTCGGCC	AAAGAGGCCT	AATAGTCAAG	ACCTTTGCAG	TTTTGATCAC	AGAAATATGA	60
AAGATTACAC	AGCTACAGCT	ATATGAATGA	TAAAAGTGAC	AGCTATGGAT	TTTTAAAGTT	120
ATAAGTTGCT	ATACTACATA	TATGTAATGT	GTGTGTGTAT	AGTGTGTAGG	TATATATATT	180
TATATTTATA	CACACACTAT	ACATGTATTT	TAAAATATTG	AAAATCCAGA	ATTATTTTAT	240
GGTAAAAAAT	ACTAAAATFG	ACTTCACATG	CTGAATGAAG	AGAGCCTGAG	TAGACCAACA	300
AACAAATGAA	AAATTAAGAC	GGTTAGAAGA	TACGCTTTCT	AAAAGAATAC	ATTTAGAATC	360
TAACTTTAAA	AAAAAAAAAAT	CCTACTCTCC	TGAGCCAGAG	TGGTCTCAGA	GAGACTCCGA	420
GAACCTAATT	TTTTACAAGT	AAAATCTTTG	AAGAATTGGT	AATTGCTAAA	TTTTTCCAAC	480
ATACTATTCT	ACAAGACTAA	CCTAAAAC TG	ATTATAAGAA	CTAGGTGAGG	AGGGCCGGCA	540
AAACTCGAG						549

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 758 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

```

GAATTCGGCC AAAGAGGCCT ATCGAGCCAC TGCACCTGGC CGATGTGTTT TGTTTGAAAT      60
CTTACTCAAA AGTATTTGAA GAGTTGTGTA TAGTTGTATG GATATGTCTG TAGTAAACAG      120
AAACAAATTG CTCAGTTTC TCTTTACTTA TTTTCTAGGT TACAGTACCT TTACCAGCAT      180
CCCAGCTTTC CTGCTTAAT TTTGGATCTA CAGGGCAACC TCTAATTGCT TTGCCTCAGA      240
CTCTTCAGCC CCCATTACAG CATAACCTC CCCAAGCACA GGCTCAGAGT CTGAGTCGTC      300
CTGCACAAGT AAGCCAGCCT TTCAGAGGAT TAATTCCTGC TGGAACACAG CATAGCATGA      360
TTGCAACCAC CGGAAAAGTA AGTAAAGAGA CATTTCACAC GGTATTGGA GAATTTAAGG      420
TAGTGTGTTT AGATATATGC ATCTGTGTTA TCTAAAAAAC TAAATGCGT CAGTTTTTAC      480
CACCTGCAA AAATCTCAA CCCAGTATA TTTACATTTT ATCTATTAC TTTTAATGTG      540
TTTGGCCCA TCTAGTTTTT ACCTAATAAC AAAGAATTCA CAAATTTATT GGAAGAATTG      600
GATTTATAGT GTCTCTTGG CTTATTTAAT TATAAGTCTG TTTGGTCAGG TAATCCATA      660
ATACTGAAG CCTAACTATA GGAGTTTGT ACTAAGGTTT TTTGCCCTTT CCTAGATTAC      720
GTCTTCACGT ATAGGACATG TAAACACAGC AACTCGAG                                758

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(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 663 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

```

GAATTCGGCC AAAGAGGCCT AAGATGGCCT TCCCATGTTA TGGCTACATG GCTGTGATAA      60
CAAGTAGAGT TATGTGTCTG CGCTCTAAAC TCACTGAGTC TTGCAGGATG TAAACATCCT      120
AGCTCAGCCT ATCCTTGACC AAAGCACANT CATGCTCCTT ACAAACCTCA ACCAGCCTGC      180
ACACTGGGAG GAGCGCGTGC TGGGCTAGAG CCACAGAATT TTGTACCGTT GGCAGCAGGG      240
AGGAGCCTGG CCCCTCCTTT CTAAGGTAGA ATCTGGAATT CAATCTGTGA GGTGGGAAGC      300
ATATACTAGG AGGACTTTCA CTCTGCTGAG TCCCTGTTCC CCCTCCCTTT TTTTCTCTTT      360
TTGCCCAATA AACCCCTTTA TTCTCACACT TCAAATTGTC TGTGAGACTA ATCTTTTGTG      420
GCCATGTGAC ATGGACCTG TCTGTAGCTG AACTAAGAA AAAGCCCCTC CCGCACAGTC      480
TGATGTTTCC TCAGTCAGAC ACTGCAAGCT GTGATGTTGG GGTGAGTACA GGATATTGG      540
CAATATTGTC AGACAGTTT GGCTGTCAGA GAGGAAGATG CTGTATGCAG ACACACTTGA      600
CAGCAATAAC TTAAGCCAC CCTGAGACTG ACTCTGCATG GTGATGCACC TGAAGGCCTC      660
GAG                                663

```

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 334 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

```

GAATTCGGCC TTCATGGCCT AGAGCGATGT CAAGTGATCT GCCCGCCTCA GCTCCCCAAA      60

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GTGGTGGAAT TACAGGCGTA AGCCACTGCG CCTGGCCCCA AGTGTCATT TTTTAATTTA 120
GTAATTCTAA CCTAGGTATT TTTCTGCAG TACAAAATGA GGATAAAGCT TTACATGAAA 180
ACATGTTGTT CCTATTATGT TTATTGCAGC AAAAAACAA CCTAAAAACC CAATCTGAGC 240
AGGTTTTAAC TAAATACTAA TAATTCTGAC ACTAGAACGT TATGTAGCTA AAAAAATAT 300
GTCGTAAAAA TAATCATGTA GAACTGGCT CGAG 334

```

(2) INFORMATION FOR SEQ ID NO:706:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

```

GAATTCGGCC TTCATGGCCT ACCGAGCTTC AGAGCATCAG CAGTGTTCCT CCTTCACTGT 60
GACGCTTGTC CTCACTTCCC AGGTGAGGAG TCTAAGAAAA CAGCCTTTCC ATCAGCCCCCT 120
GTCGTGACAG ACCCTCCAGT GGGATGGTAG TGGCTGCCTC ACCCATTTAC AGGGCAACCC 180
AGTTTTGCTC CTTCTGCCTT GAAATTTGTT CCTCCCAGAA ACTGTCCCTC ACAAGGCATG 240
AACAAATCAAT AGAAGATATA CGTGGTCTTC CCAGCACTAC AGCTGCAGAA TGAGCTGTGG 300
AGTGCCCCGT CCGGAGTCCT GAACAGCTTC AAACCTTTCC CCTTTAGAAA TGCCTAACAC 360
GCCCTCGAG 369

```

(2) INFORMATION FOR SEQ ID NO:707:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

```

GAATTCGGCC TTCATGGCCT AGGCATCCTT GGTGCGGCAT CCTTGGTGCA TTATATCAGG 60
AGGCAAATGA TGTGGGTTTG TCCATTGTT TGTAATGSTA ACATTGGTTG CTGGTTAAG 120
GTGAAGGGTG CCAAGCTTCT CCACTGTAAA GTTCCTATTT TTTTCTCTGT AATTAATAAG 180
TAATTTGTAT GATACTTTGA GATAACAAAG TAGACTGTTT ATCAAACCTT CATCAATGAA 240
TTTAACATCC AAAGACGCCT CAAGAATGAT CATCAAAAGC AGCCTACTAA TGACTGTCAT 300
TTACCATTTA ATACATTTC AAGAGTGCAC GTGCTCTGTG ACATATTCTG GGAAGGAATC 360
TCGAG 365

```

(2) INFORMATION FOR SEQ ID NO:708:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

```

GAATTCGGCC TTCATGGCCT ACACAAAGCT TCTGGAGGAC AAACGGGAGC AGTTGAAGAA 60

```

```

GAGCAAAGAG CATGAGAAGC TGATGGAGGG AGAACTTGAA GCTTTGCGGC AGGAATTTAA      120
AAAGAAAGAC AAGACGTTGA AAGAGAATTC CAGAAAGTTG GAGGAAGAAA ATGAGAATCT      180
CCGAGCAGAG CTACAGTGTT GTTCTACACA ACTGGAATCC TCTCTCAACA AATACAACAC      240
CAGCCAGCAA GTCATCCAAG ACTTGAATAA AGAGATAGCC CTTCAGAAGG AGTCCTTAAT      300
GAGCCTGCAG GCCCAGCTGG ACAAAGCTCT GCAGAAGGAG AAGCACTATC TCCAGACTAC      360
CATCACCAA GAAGCCTATG ATGCATTATC CCGGAAGTCA GCCGCCTGCC AGGATGACCT      420
GACACAAGCC CTCGAG                                     436

```

(2) INFORMATION FOR SEQ ID NO:709:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

```

GCTGCTCTAT ATCTTAGAGA AAATAAAGA ACCACATGTT GCTTCCCTGC CTGCAAGCTC      60
TTCTGAATTC ATCACCATTTC ATGTTCCCTTC CTTCAGGGGA AATGAAGGCA GATTGTTCTG      120
TTGGTGCTCA CAGATCTCTT TCTGTTCTGA TACCCTCCTC TTCTCTCCTC GCTTCTTTCC      180
CTTCATCATG TGCTCCTATA CAAGTCTCTC CCAACTTTAA AACAAAAACA AACCCCTTCCC      240
TAAATCTTGT GTTTGTTCCA GCCATTAGAC TGTATCGTCC TTGCCATCCA CGTTATTGGA      300
AGAAGGCCAG CTCACCTCTA CTCCTTTCTT GCCCTTTCCC TCTTAATCTG CTGTCCTCTG      360
ATTTCTGCCC CCACAACTC GAG                                     383

```

(2) INFORMATION FOR SEQ ID NO:710:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

```

GAATTCGGCC TTCATGGCCT AGGGGCCTGA AGATCTTCGG GTATTGGGCT CCCAGAATCT      60
GACCACAGTG AAGCTAAAAG GGGTGGGTGA CAGCTTCAAG AAGTATCCTG ACTACGAGTC      120
CAAGGGCATC AAGGCTCACT TCAACCTGGA TGAGAGTGGC GTGCTCAGTC TAGACAGGGT      180
GGAGTCTGTA TTTGAGACAC TGGTAGAGGA CAGCGCAGAA GAGGAATCTA CTCTCACCAA      240
ACTTGGCAAC ACCATTTCCA GCCTGTTTGG AGGCGGTACC ACACCAGATG CCAAGGAGAA      300
TGGTACTGAT ACTGTCCAGG AGGAAGAGGA GAGCCCTGCA GAGGGGAGCA AGGACGAGCC      360
TGGGGAGCAG GTGGAGCTCA AGGAGGAAGC TGAGGCCCCA GTGGAGGATG GCTCTCAGCC      420
CCCACCCCTT GAACCTAAGG GAGATGCAAC CCCTGAGGGA GAAAAGGCCA CAGAAAAAGA      480
AAATGGGGAA CTCGAG                                     496

```

(2) INFORMATION FOR SEQ ID NO:711:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

GAATTCGGCC	TTCATGGCCT	AGTATGGAAG	GTGGAAGTAA	AACTGAAATG	ATCAGTTCAC	60
ATATTTGTAA	ACTGCGTATT	TTATATCAGT	CGCTGGATTA	GGCCCTAGA	GACAGTGGTG	120
GCTAAGTGAT	AAAGTCTTTG	CGCTTGTCGC	ATTTATAGT	GTAGTGGGAA	GACAGAAAGC	180
AAACAAGTAG	AGAATCATAT	ATGTAATGTG	ACCTCAGGTC	CAGCTAAGCG	CCAGACAGAA	240
GAAAAAGTA	AGGTGAAGGT	AGAGGGGTTG	GAGCAGGAGG	AAGGTGTTAT	TTAGGTAAA	300
GTGGCCAGGG	AAGGCCTTTT	GAAGAATTGA	TATCGATTCC	AAAATGATGA	GAAGGTGCAA	360
TTGTGCCACC	ATGGAGGAGA	AGAGCTTTCT	AGGCAGAGGG	CAGGTGCAA	GATGGTAGGA	420
ACAAACACGG	CTTGTGAAA	GAACAGCAAT	GTTTGAGGAA	TGAGCCAGAC	TCGAG	475

(2) INFORMATION FOR SEQ ID NO:712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

GAATTCGGCC	TTCATGGCCT	AATTTTGCAT	AAAACCTCAT	CAATCTCTGC	CAATCACTGA	60
GCCCAAACCC	ATTTTCACTT	TGTTTAGGT	ATTTATAATA	ACAGCACTCC	CACTTCTCAT	120
GATCAATTTT	CATCTTCAGC	GGTTCAGGCT	GCTTTAATAA	AGTTCCATAA	CCTGAGTGGC	180
TTTTAAATAA	CGGAATGCAC	ATCTCAGT	TCTGGAGGCT	GGAAGTCCAA	CAGCAGAGTG	240
CCAGCATAAT	TGGGTTCTGG	TGAGAGAGCT	CTCTGGGTT	TCAGACTGCT	GCCTTCTCAA	300
TGCAGCTTCA	CATGGTGGAC	AGAAAGAGCT	CTCAAGAGTC	ATTTTAAAGG	GCACCAATCT	360
AATTTATGAA	GCCTCCACCA	TAATAAGCTA	ATTACTTCCC	AAAGTGCTGA	GATTACAGCT	420
GTCAGCCACC	GTACCTGCCT	GGGAATTTT	TTAAAGCTCA	AATTGGATAA	GAGGGTTATA	480
GGAATATATT	CATCTATCAT	ATAGAAAAGA	ATATGTGCTC	AGTCCCAGGA	AATAGAAAAT	540
ATATTACCTT	ATTTATACTG	TTTTAATTAA	TGCTTTTAA	AATCTGATTA	ACTCTGGGAG	600
AGCTCGAG						608

(2) INFORMATION FOR SEQ ID NO:713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

GAATTCGGCC	TTCTTGGCCT	AGTGCACTCC	TGTAATCCCA	GCTACTCGGG	AGGCTGAGGC	60
AGGAGAATCA	CTTGAACCCA	GGAGGTGGAG	GTTGCAGTGA	CCCAAGATCA	TGCCACTGCA	120
CTCCAGCCTG	GGTGACAGAG	CGAGAACGTC	TTTAAAAAAA	TTAAAAAAA	AAAAAAAAGA	180
TTGCACAAAT	CAGACAGTGA	CCCAGAGCTC	AGCCTTGAGG	AAAGTCAGTG	TTGGGGAGGG	240
GAGGGCAAAG	AAGCAAGTAA	AGGTTTAGCA	GACATGGCAC	CTCAGTCTGG	ACTTGAAAGGA	300
GGGCTAGGCA	CAAAGGAAGG	GGAACATGTC	AGATGAGAAA	CACGTGAAGG	TTCAGCCAGA	360
TGAGCAAGGA	AGGTTGGTTA	GAAAGAGGAG	CTGCTGGTGT	GGCTCCTGTG	AACACAGGTA	420
GATAGGGCAC	GATAGAGTCA	GGCAGTTAGA	AGCCAAGCTG	AGGAATCGAC	ACTTGATTCC	480
ATAGGTAAGT	AGGGGAACCT	GAGGATGTTT	AATCAGAAAT	GAGATCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:714:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```

GAATTCGGCC TTCATGGCCT AATTTATCCC ATCCTTATCC CATCCTTATA AGGAATAATG      60
TATTGAATAA AGATTGTATC AGTATTGTGA ATTCAATAAA CCAGAACTTG TGGAAATAAA      120
TATGTAGGAG ACATAAATAT GGTGTCCTCA AATTGAATTA TGTGGGAAAA AAGTGGGGTG      180
GAGTTAAAGT CCAAGCCAAT AAAGTTGTAA CATTAAAGAA AGACAGGTAT GGGATGCAAG      240
GTGCAAAGAA AAGGTCATCA TATCTCATA TGGGGTGAGA TAGAAGACTT CCTGAAGTAG      300
GCGATGCCTA TATTGAATCT ATAAGGACAA ACTGGCATCA ATATGTCAGG GAAGACAGGT      360
TGAAGGTGGT CCTGCCAGAG AAAGGAGCAA GGATAAAGGC AAGGAAGCAT GTAACGTAAT      420
TGTTTGTGGA GAAACCTCAA ATCGGCTGAG GAAAAACGAC TCAGGTATGT AGTAGGGCAC      480
AGTATAAGTA GGTCTCGAG                                     499

```

(2) INFORMATION FOR SEQ ID NO:715:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```

GAATTCGGCT TCATGGCCTA GAGATTTAAT GTTCCCTTAC CTTGCTGGAG GAACATCAAT      60
GTTGGAGGAA ACAACTTTTC TTTTGTGCTC AAGGAGACAG ATGGAGCGAG TGTTCCTTTT      120
TTCATGGTCA AGGATCCGGC TGGCTTTTTT GGTGTCTGCT GTTTTCACAT CTTCCTCCAT      180
GGCCAAGGAA AACACGTGTT GATGAGACAT TTTTTTACCA CAGTCACGTT TTAAGTCCCTC      240
TGACTGAAAT GTGAAGGTCA TTTCCCGCTT AATGCTCCCC ACCTGTGAAA TGAACACAG      300
AAATTCTTAC TCACATAAAA CATCACCTTT GTACGACTAC TGCAGATGGC GGTGAGGAGA      360
GATTACAGAC ACTGTCCTTC CTGTTTCTCT GAAAGATTGT ATAATTTTAA TAAGAAAAAT      420
GCAACTCGAG                                     430

```

(2) INFORMATION FOR SEQ ID NO:716:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```

GAATTCGGCC TTCATGGCCT AGACCTTCTG GGTGAACGAG GGCAAGCAG CCAAGTTCCG      60
CTGCTACGTG ATGGGCAAGC CCGAGCCCGA GATCGAATGG CACTGGGAGG GCCGCCCGCT      120
GCTCCCGGAC CGCCGCCGCC TCATGTACCG CGACCGCGAC GGCGGCTTCG TGCTCAAGGT      180
GCTCTACTGC CAGGCCAAGG ATCGTGGGCT CTACGTCTGC GCCGCGGCA ACTCGGCGGG      240
CCAGACGCTC AGTGCCGTGC AGCTGCACGT GAAAGAGCCC CGCCTCCGGT TCACACGGCC      300
CCTGCAGGAC GTGGAGGGCC GTGAGCACGG GATTGCCGTG CTGGAATGTA AAGTACCCAA      360

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CTCCCGCATC CCCACGGCCT GGTTCCTGA GGACCAGCGG CTGCTGCCCT GCCGCAAGTA 420
CGAGCAGATC GAAGAGGGCA CTGTCCGGCG CCTCATCATC ACAGGCTCGA G 471

(2) INFORMATION FOR SEQ ID NO:717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

GAATTCGGCC TTCATGGCCT AGCCACTCTT AGCAACACAG ATTTTCTTCC AAATTATGCC 60
TTGAAGCTGC TCCCGGAGCC ACCCGCTCAT CAGCACCCCTG CTCCTGTGGT CCTTCTCGTG 120
AAAGGCAGAG GGGAGATGCC TGTGCCCCG AGTCTTCTCT GCAGCTGCCG TGGGAACAGG 180
CACCTTCCCG GCTGCTGGGG ACACAAGGAG GGGGAGTCAC CGTGGCTTGC TCACTTTCCA 240
GATCAGCCAA CTGCAGAAC TTTGTTGTTG TTTAGATCCC ACGTCTGACG GTTTAGAACA 300
GCTTTTATAA CATGGTTAAA CATGTTTACA AAGCAAGGGA GACATCTCTT ACCTTGACAA 360
CACGAGGCTC CCACAGACCG CCTTCCCCCA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:718:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

GAATTCGGCC TTCATGGCCT AGAAGGAAAG AAATTTTATG TGAGAGAGCA TCTTGTATGG 60
CAAATTCTTG TCCTAAAGTA GAATGACTAG GAAAGAGCAA AATATAGGAC AAGTCAGAAA 120
GTCATAAGAT GGGAAAGAAA AACTTACAAC TGCTAGATCT TCTCCTGTCT AGAAGTGTG 180
TGTGTGTGAT GCTTATATGA AGGTACTCTA ATTAATTGGA TTAAGAGAAA ATGAAACCCC 240
ATCTCTACTA AAAATACAGA ATTAGCCGGG TGTAGTGACA CATGCCTGTA GTCGCAGCTA 300
CTCAGCAGGC TGAGACAGGA AGATAACTTT AACCCAGGAG TTGGAGGCTG CAGTGAGCCA 360
AGATCGCGCC ACTGCACTCT AGCCTGGGAG AGACAGAGCG AGACTCCGTC TCAAAAATGA 420
AAAAGTAGAG CCTGGTAGAG TGAAGCCACT TGCAGGAGTC GTTTAGTTAG GGCTGTGTTG 480
CCTTACAGTG CTGGTGCCT CACAGATGAT AATAGTAATA AAAACACCA CAACTCGAG 539

(2) INFORMATION FOR SEQ ID NO:719:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

GAATTCGGCC TTCATGGCCT AGGCAGTGGA TAATTGTCCT CTGGAGGAAC CATCTGTGAC 60
ACATTCTACA TGGTTCCTTA GAGGGTCCCC AAGTGGGATT GAGTCCCTCT TGTTCCTAGC 120


```

AGTAAGCAGT TCTGTTATAC ACTCTTTATA TGCTTTTCCT CCTTTCCTCT CTCAGTCTCT 180
CTGATCCTTC CACCTGTGCT CTGGGTTTAC CTCTCAAGTA AACCACCTGC ACACAAGTCC 240
CTGTCTCAGG CTCCATTTGG GGAAACCAAA CTAAGACACC ACCTCAAAAC ACAGAATTTT 300
ACGAGGCTCC AAATGCCTCA GAAAAGTAAT GTAAATATAA AATGACCAAT TTTTGAAGT 360
ATATTAATCC TAGTTATTTA ACTCGAG 387

```

(2) INFORMATION FOR SEQ ID NO:720:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```

CCCGTGTATA GTTTGCAAAT ATTTTCTCCT CTCTGTAGG CTGTTTACTC TTGTTGATAG 60
TTTCTTTTGC CATGCACAAG CTTTITGGT TAATTAGATC CCATTGTGCA ATTTTGTCTT 120
TTGTTGCAAT TGTTTTTGGC GTCTTCATCA CGATATCTTT GCCAGTTTCT ATGTTCAAAA 180
TGGTATTACC TAGGTTCCT TCCAGAGTTT TTATAGTTTT GGGTTTTTAT TTAATCGAG 239

```

(2) INFORMATION FOR SEQ ID NO:721:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

```

CTCGAGCACT ACCCTAGACG GTCTCATCAC TATACTGGCT CCTCCTTACC CCCGTAAATC 60
TCCCAGGTAC ACTTCCTGAT CACCCTCCGG ATACCTCATC CCTATCTATT CCTTTTATAA 120
ATAATTCCCT GCTCCTCCTT CTCACCCACA ATCCACTCGC AGTTCAAGGC CTCAGTGCCA 180
TCGACTCCAC TGTCTGTGAG TGCTTCCCAA TATGCCCCAG GACCCCTCCT GGTGTCACGC 240
TCTGTATCCT GACACCCCTT GTAGACGAGT CCCGAAATTC CCGCCCCGTC CCTGGAGCTC 300
CCTAGGCCAT GAAGGCCGAA TTC 323

```

(2) INFORMATION FOR SEQ ID NO:722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

```

GAATTCGGCC TTCATGGCCT AGGCCTGTGG AGCCCCAGCT CTGGGTCCCT AGCCCCGGTC 60
CAGGCAGCCA GGCTCCCTCC TGAGCTGAGA AACGGAACCT CGCGAACCAC TGGTGGCACA 120
TCCTTCTCCT CCCCCGCCCC TGATCACCCG CCCCCGATC AGAAATATAT CTATATTCTC 180
GACTAAAGTC TCATCAGGAA ATATTTCCTG TCTTTTATTT TAAGCATCAA ATTGTTTATG 240
TTGATTTAAA AAGGAAAAAA TACAGACGAC TCGAG 275

```

(2) INFORMATION FOR SEQ ID NO:723:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

```

GAATTCGGCC TTCATGGCCT AAGAAGCAAC AATCATATTA GCTGGGGGAG GAGGATAGTT      60
TGGTATTTT GTAGTTTGCA CAGTGACCTT TTTAAAAATC TGGTTAGGCA AAAATAGTGT      120
GATCTTGTT GTTGTCTCAC TTCATTATGA TCACAGAATG ACCTGGTATG ATGTTAGTGT      180
TTTATGAGAG TGTATGTTT TAACAGGGGA ACACCGCAGT CAATTCCTAA CAACACTAAA      240
GTGTCAGTTC TGTCGTGAC ACCAAGGGCT GTTTTCTTT TTCTCATATA ATGTTGAGGC      300
AACCAGGAAG ACTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:724:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

```

GGCCTCAGCA GGTGTGAAGC GTGTGCTTTA GTTTCGTGGG AGGCCTGGCA TCCCCGAGAG      60
GGAGGGGAAA GGTAACCACT CCTTTGTGGA GGTCCGCAGG GTCATTGTCG TGGATTGCA      120
CAGTCGGCTG GCGCGTGCAA TGGCGGAAAG AAAAGGAACA GCCAAAGTGG ACTTTTGTAA      180
GAAGATTGAG AAAGAAATCC AACAGAAATG GGATACTGAG AGAGTGTTTG AGGTCAATGC      240
ATCTAATTTA GAGAAAGCAG ACTCGAG                                     267

```

(2) INFORMATION FOR SEQ ID NO:725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AAGTCAGTGG TAAGCCGCAG CAGTTTCCTG CCACTCGTAA      60
TATGGCAATT AAAAAATTTA AATTTGTGGC TGCTTGGGGT CTGGGAGGTG ACCTGCTCCT      120
CAGCAAATTT TGACTGATAA ATTAATGCCT GGGTCTTCAG CCTGGTTCTT TGCTGGCCAG      180
TGTGACAACA GTCTGTCACG TCTCTGGGGG CACATTATAA TTAACAGATG TAATCTTTCT      240
CCGGTTCAGG GTCATCTGTG AATCAGGGGT ACTGCCCCAG TAGAACTAGG AACATCCAGC      300
AAAAGACTGT TTTCAAATA TACAATTAAG TGAAAAAAGC ATGAAGAAGT CGAG          354

```

(2) INFORMATION FOR SEQ ID NO:726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

```
GAATTCGGCC AAAGAGGCCT AGAGGTTGAC CTGAAAAACA ATGAAACACA TGAACACACT    60
TCCGATTTTC TCCTCGCTGA TTAGCTTCCT GCCTGCTGTC AGTGCTGGAC GAAGTGCTAT    120
AACTACTTTA TGTAACATTA CAGAACAGCT CGAG                                154
```

(2) INFORMATION FOR SEQ ID NO:727:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 338 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

```
GAATTCGGCC TTCATGGCCT AGTGGGAAGA TGTGGATGAT GAGAAGGGAG ATAGCAATGA    60
TGACTATGAC TCTGCAGGCC TATTGTCAGA TGAAGACTGT ATGTCTGTGC CCGGAAAAAC    120
TCACAGAGCT ATAGCAGATC ACTTGTCTG GAGTGAGGAA ACAAAGAGTC GCTTCACGGA    180
GTATTCGATG ACTTCCTCAG TCATGAGGAG AAATGAACAG CTGACCCTAC ATGATGAGAG    240
GTTTGAGAAG TTTTATGAGC AATATGATGA TGATGAAATT GGAGCTCTGG ATAATGCAGA    300
ATTGGAAGGT TCTATTCAAG TAGACAGCAC GACTCGAG                                338
```

(2) INFORMATION FOR SEQ ID NO:728:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 433 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

```
GAATTCGGCC TTCATGGCCT AATTGAATTC TAGAACTCTC CCAGAGAAAC CAGGCAGATA    60
CTGCTCCACA CCGGTGAGCT GCTTCTCACC TGGGTAGTCT AGGGTGGTTT GCTCCAGAAT    120
TGTATTTCTG CTTTTCTTTT TTTTAACTTG GCAGTGGTTA ACCATTCCCT GGAGCAGCAC    180
CAGGTAAGTC AGCTTGATC AGAGTCATCT GCTTTACCTG ACATGAGCAC ACGTTGTCAT    240
ATATTTGCAC ATGCAGATAT CATATGTTAA ACAATATCAC ATTGTTGAAG AAAATTACAC    300
TGGAAAGCGT AAAATATAGT TTGGATGCCA TATTGAGTGT AACTTAATCC ACCCGATTCA    360
GAACTTTGTG AGAGTGCCTC GGAGTTCCTA TTTGGAAATA TCAGTTAGCA GTTTTAGTCA    420
GTAGAGACTC GAG                                433
```

(2) INFORMATION FOR SEQ ID NO:729:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

GAATTCGGCC	TTCATGGCCT	AACAAGAAAC	ACCAAGTACC	TCGACCTCAA	GAATTCACAA	60
GAGATGCTCC	GCTACAAAGA	GGTCTGCTAC	TACATGCTCT	TTGCCCTGGC	TGCCTACGGG	120
TGGCCCATGT	ACCTGATGCG	GAAGCCCGCC	TGCGGCCTCT	GCCAACTGGC	TCGGTCCTGC	180
TCGTGTTGCC	TGTGTCCTGC	GAGGCGCGCG	TTGCCCCCTG	GAGTCACCAT	CGAGGAAGAC	240
AACTGCTGTG	GCTGTAATGC	CATTGCCATC	CGGCGCCACT	TCCTGGACGA	GAACATGACT	300
CGGGTGGGAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

GAGTTGTCTC	TCTGAATTAA	CTTCTCACC	AATAGCTCCT	CTTTAAGATC	AATAACTCTT	60
ATGTTTGAC	TTTTTAGGCT	ATTTCTAGA	TCTTGATGT	GTGTCTTATT	ATTTTTTATT	120
CTTTTGTCT	CCTCTGTGAA	TTTTCAAATA	GTCGAG			156

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

GAATTCGGCC	TTCATGGCCT	ACTTGAACCT	AGATCTCACC	CCCAGGATGT	TGCGGAGGCT	60
GCTGGAGCGG	CCTTGACGCG	TGGCCCTGCT	TGTGGGCTCC	CAGCTGGCTG	TCATGATGTA	120
CCTGTCACTG	GGGGGCTTCC	GAAGTCTCAG	TGCCCTATTT	GGCCGAGATC	AGGGACCGAC	180
ATTGACTAT	TCTACCCCTC	GTGATGTCTA	CAGTAACCTC	GAG		223

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT AAATTATTGC AAAGTGTATA TTGGTTAAAA AAAAAAAGGA      60
GGAAGAGGCA GTTTTTCATG ACGGTAAAAA GTGCAGGATT TGGAGTCCCA TGGTCCTGGG      120
TGTGAATCCT GGCTGTGGCA CTAATATCT GTGTGACTGG CTGTGAACCT CTCGTGCCTC      180
ACTTTCTTCA TCTGCAAAAT GGGTAGTTGT ATAGCAAATG CACATAGAGA AACTTAACA      240
CTTTGGCACA TTGGAAGCAC TCAGTAAATG TTAATTGTTA TTATTGTTGC TCTAAAGAGA      300
ATCCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:733:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 275 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

```

GAATTCGGCC TTCATGGCCT AGATTAATTC TAGACCTGCC TCAGCTCCAC TCCTTATGGT      60
TTGCCACCAT AACCTACAAC ATTTGTCCGT CCACCCACAG TGTCTTCTTC CTTTGTGGCA      120
GGAATCTTA TCTCTGCCTA CCAACCAATT GGTCAAGAGC ATGCACCCTA GTGTCTCAAT      180
CTCCAGACAT TAACATCCTG CCAACAACC AGACCATCCA GGTTCCTTTA GTGACCCCTA      240
TCTCATCCTC TTCCACATGC AGTAGGCAGG TCTAG                                     275

```

(2) INFORMATION FOR SEQ ID NO:734:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

```

GCAGATCAGA GGCACGTTTC CCACAATGTC GAAGAGGCGC TGAGGCAATT CTGCAAGAAG      60
ATTTTGGGGT TTTGGAAAAG AAGCTATGGA AAACGGAGGG GCAGGCACTC TGCAGATAAG      120
GCAAGTCCTG CTTTCTTTTG TTTTGCTGGG AATGTCTCAG GCGGGCTCTG AAACGGGAA      180
CTTTTGGTG ATGGAGGAAT TGCAGAGCGG GAGCTTTGTA GGAAATTTGG CAAAGACCTT      240
GGGACTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:735:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 324 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

```

GAATTCGGCC TTCATGGCCT ACACAGACTG GGCAATTTAT AATGAACAGA AGTTTATTTG      60
GCTCTTGGGT CCAGAGGCTA GGAAGTCCAA GAGCATGGTG TCAAGCATCA GGTGAGGATC      120
ATCACCCCGT GGTAGAAGAT GGAAGGCAGA AGTGAGCGTG TGAGACAGAG AGGGAGAATT      180
GGACTCAACT CATCCTTTTA ATCAGGAACC CACTCTGTCA GTAACGAACC CATCCCCACA      240

```

ATAATGGCAT TAATCCATTC ATGAGGCCCC TACCTCTTTT TCTCCCCCG CCCCCGAGA 300
TGGAGTTTGT CTCTTGAGCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:736:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

GAATTCGGCC TTCATGGCCT AACACATAC CAGATTCTTA GATTCATTG GTGAAGGAAG 60
CCTCTGAATT AAAACTTTTA AATATTTCTG ATTTGCAACC AGACGAAAA GAAGAAAATT 120
GACAACTTTT TTGATGCAAC TTTGTGAAAT CATGGTGTTT CTGGTTTTTC TGGTCTGGTT 180
TTTGTGTTG TTTTGTTTTG TTTTGCCACA GTTTAGTTCC TCACCTGATC TTTCTTGTA 240
TCCACTTCAG AGTCTCGAG 259

(2) INFORMATION FOR SEQ ID NO:737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

CTCGAGGCGG TGCCAGACAC GGGTCTCCTC CGACTGGGCG GTGCGTGGA TGCCGCCAGC 60
GTCCAGGTAC TGCGTGATGC GGATGTAGGC GATGCAGGCT GACTCGTCGC CCATCAGGTG 120
GATGTGGGA TTCAGGATGG TGGTGTGCAC GGGCTTGCTG TTCCGGGACC ACAGGTTTTT 180
AAAATAGAAT CGATGGAAGT CCAGGCCCTC AACCAGGTTT CCCAGGGCCT CAGGTTTCGAA 240
GGCTGTCATG CCAGGTCGC ACATCTTCGT GTAGGACTCA AAATCTCCAT TGCTTATGGC 300
TTCAATCAGC TGCTCTGTCA CTTTATAAT TTCCTGTTT CGCACTTTGG TGTCTTCATC 360
CTCGATGGTG GTGTTGGTGC TCTCTGAGTA GGCCATGAAG GCCGAATTC 409

(2) INFORMATION FOR SEQ ID NO:738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

GAATTCGGCC TTCATGGCCT ACTTCCCCT CCTTCCTTCC TTCCTTCCTC CCTCCCTCCT 60
CTCTCCTCTC TTTCTTCCTT CCTTGCCTCC TTCCATCCTT CCCTCCCTCT CTCTCTTTCT 120
TTCTTTCTTT CTCTCTCTCT CTCTTTCTTT CTTTCTCTCT CTCTGTCTTT CTTTCTCTCT 180
TTCTTTCTTT CCATCTTCTT TTCTTTCTAT CTTTCTTACT TTTGATGTAG CTGTCCAGAC 240
CTAATGAAAA TACTGGCATG AGTGATGCCA CCTTTAGATT CTCCACCTTC CTGTTCTGT 300
CCTATTCACC AACATGAATT GGTTTGTGGC TGTAAGTACT TGGTGGGTTA TTGCTCATAG 360

ATTCAGTTGC ATTTTGTCTG AGATAGTGCT GTTACCAAAA GCAGGGGTGC TGCTTGAAGA 420
 AGTAAACCTA ACTCTGAAAA ATAGAGACTC TCCAGAAACA CTCGAG 466

(2) INFORMATION FOR SEQ ID NO:739:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

GAATTCGGCC TTCATGGCCT ACATTCTGCA AACTATTTTG TTATTAGCTT TTCACTTAA 60
 AAATAGCCCT GCTTGCAAGC AGGCTCTGTG GTGCAATGGA TAGCGCATTG GACTTCTAGC 120
 CTAAATCAAG AGATTCAAAA ATAGCCCTGC TAAATATTTG CAATCTTTCC TACGCTCCTT 180
 TTCCCCCAA AGTGACTTTG GATATCCAGA GTTACCAAAT CTAGTATTTG AAGTCCTTAG 240
 GTTTGAGGGT TGAAAGTGAA AGGCAAGCTG TTTTAATGAA AATTCCTAAC TGAAGAGAGC 300
 GGAGACTTAA GATGCTTAAA TTTGGTCAC ACCTGAGCGG TATTTGTTTG CATGGCAGGA 360
 GCTCGAG 367

(2) INFORMATION FOR SEQ ID NO:740:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

GTGATGGACA AAGACAGGGA AGGCCTCATC AGCAGGGATG AGATCACAGC CTACTTCATG 60
 AGAGCCAGCT CAATCTATTC CAAGCTGGGC CTGGGCTTTC CTCACAACCT CCAAGAGACC 120
 ACCTACCTGA AGCCCACTTT TTGTGACAAC TGTGCTGGAT TTCTCTGGGG AGTGATCAAA 180
 CAAGGATATC GATGTAAAGA CTGCGGGATG AACTGTCACA AACAAATGCAA AGATCTGGTT 240
 GTGTTTGAGT GTAAGAAGCT CGAG 264

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

GAATTCGGCC TCATGGCCTA CACGACCAGC ACCGCCACTG CCACCTCACA GCCTTTCCTC 60
 TTCGGGGCGC CCCAGGCCTC TGCTGCCAGC TTCACCCCGG CCATGGGCTC CATATTCAG 120
 TTTGGCAAAC CTCTGCCTT GCCACAACC ACCACAGTCA CCACCTTCAG CCAGTCCCTG 180
 CCCACTGCCG TGCCAACGGC CACCAGCAGC AGCGCTGCCG ACTTTAGTGG TTTTGGCAGC 240
 ACCCTCGCCA CCTCCGCCCC GGCCACCAGC AGCCAGCCCA TTCTGACGTT CAGTAACAGC 300
 AGCACCCCGG GCCTCGAG 318

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

```

GAATTCGGCC TTCATGGCCT AAGAAATGAA AAAGATTATT GAACTATGC CAATGACTGA      60
GAAAGTTGAA GAATTGCTGC GTGTCATAGG TCCATTTTAT GAAATGTGCG AGGACAAAAA      120
GAGTGGCAGG AGTTCTGATA TAACCTCAGT CCGACTGGAG AAAATCTCTA AATGTTTAGA      180
AGCTGAAAGC AGTGACAGTG GAGCCGAGTC TGAGGAAGAA GAGGCCCAAG AAGAAGTGAA      240
AGGAGCAGCC CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

```

GAATTCGGCC TTCATGGCCT ATGTTTTTAT AGCACCGATG GTACTGTTTT ATTTATTGCC      60
AATAGACCAC AACATTCACA TCTGTTTTTC CTCAAGGGAA CCGTATTTGC TTTTGGTTGA      120
AGGATTTATC TATTTGATAC TATCCAGAAT ATTGTGAAGC TATAATTTCC TGGGTTATAT      180
TTTAGATGGG TTGTCTGCAT GGTGGTAAAA TAAGCTTTTT CCTCTCGCCT ACGTCCTTTG      240
GAAGATCTCC TGATCATACA TAACTAGGTA GGGCTTATTC TTGCTGCCGG AGCTTGGCAC      300
CCAGCTCTAG ACTGTTTCTT TGAGCATTAC TGCAGATTGG AGACGTGTGT GAGAGGAGCA      360
GCGCTCAGAA ATAGGGCTTG AGGCTCAAGC AGAAACTGAA GCTCTCATTC AAATGAAGAT      420
GCTCTCTCTA CCGCACGATC GGCAGTGAGA AAAGGAGGAT GAAAATCCTT CTCATCACAA      480
AGAGCTTGAA GGAACCCACG TCCCAGATT AGCAACCCTA GAGTTCATCT GCTCAGGCCG      540
GGAAATGTGT AAGCTTCCTT GATCAACTCC AGGCCTCGAG                                     580

```

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

```

GAATTCGGCC TTCATGGCCT ACCCAGAGAC TCGCGGACGC TCACGATAAC CAAGGACGAC      60
CGCGAACCAG GGGCAAAATA ACATGGCAGC CAGACGAATT ACACAGGAGA CTTTGTATGC      120
TGTATTACAA GAAAAAGCCA AACGATATCA CATGGATGCC AGTGGTGAGG CTGTAAGCGA      180
AACTCTTCAG TTAAAGCTC AAGATCTCTT AAGGGCAGTC CCAAGATCCA GAGCAGAGAT      240
GTATGATGAC GTCCACAGCG ATGGCAGATA CTCCCTCAGT GGATCTGTAG CTCACTCTAG      300
AGATGCCGGA AGAGAAGGCC TGAGAAGTGA CGTATTTCCT GGGCCTTCCT TCAGATCAAG      360

```


CAACCCCTCT CGAG

374

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

GAATTCGGCC AAAGAGGCCT ATTGGTTTCC CTGCTTCCAT TCTTACTCCC CTACACTCTG	60
TTCTCCAAAA AATAACCATT GTGATCCTTT AAAATCCTGA CTCTCTCCTG CTCAGAGTCA	120
TCCAGTGGCT TCCCATATCA CGTAAATGA AACCCCAATC GTCCTTACT CTGGCCTGCA	180
GGGGCCTGTG TGATGGGCCT TCTCCAGCTT CGTTCTTCTT TTCTTCTGT TCTCCCCTCT	240
GCTTACCTAC TCCATCTCCA GGGCTTCTTT CCAGCTCAAG CCCTTTCCTG TTGAGAGCAT	300
TTGCTTCCC CAGGGCACTC GAG	323

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

GAGAACAGTG TTACCAAAGA AAAGGACATG TTCAATTTC AAGGAGCCCA GGAGGACATC	60
TCTAGACTTC GCAGGAAGCT GGAGACCACA AAGAAACCAG ACAATGTACC CAAGTGTGAT	120
GAGATTCTGA TGAAGAGAT TAAGGATTAC AAGGCACGCT TGACCTGTCC ATGCTGTAAC	180
ATGCGTAAAA AGGATGCTGT TCTTACTAAG TGTTTTCATG TCTTCTGCTT TGAGTGTGTG	240
AAGACACGCT ATGACACCCC CCCCGCGCTC GAG	273

(2) INFORMATION FOR SEQ ID NO:747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 666 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

GAAGATCTTC GCTGTCCTCT CTGCCTCTAT CACACCAAAT ACAAGCGCAA CATGATTGAC	60
CACATCGTGC TGCACCGAGA AGAGCGTGTT GTCCCCATTG AAGTTTGCCG GTCCAAACTG	120
TCCAAATACT TGCAGGGAGT AGTTTTCCGC TGTGATAAGT GTACCTTCAC CTGCTCCAGT	180
GATGAGAGCC TCCAGCAACA TATAGAAAAG CACAATGAAC TGAAACCTTA CAAATGCCAG	240
CTCTGCTACT ATGAGACCAA GCACACGGAG GAACTGGACA GCCACCTTCG GGATGAGCAT	300
AAGGTAAGCC GTAACCTTGA GCTGGTTGGA CGGGTTAACT TGGATCAGCT GGAACAGATG	360
AAGGAGAAAA TGGAGAGCTC CAGCAGCGAT GATGAGGACA AGGAAGAAGA AATGAACAGC	420
AAGGCTGAAG ACAGAGAGCT GATGAGATTT TCTGACCAGC GGGCTGCTCT TAACACTGAG	480

AAGCGTTTTTC CATGTGAATT TTGTGGACGG GCGTTTTTCAC AGGGCTCTGA GTGGGAAAGA	540
CATGTGCTGA GACACGGCAT GGCATTGAAT GACACCAAGC AGGTGAGCAG AGAAGAAATC	600
CACCCAAAAG AGATCATGGA GAACAGTGTT AAAATGCCCT CCATAGAGGA AAAGGAAAGT	660
CTCGAG	666

(2) INFORMATION FOR SEQ ID NO:748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

GAATTCGGCC AAAGAGGCCT AACAAACCGAA TATAGTACAC GACCTTCCTG CAGCAGTTCT	60
AAGCTACTGT CAAGTATGGA AAATCCCGGC AATTCTGTAC TTGTGTTATA CTGATGTGAT	120
GAAATTAGAC CTAATCACAG TGGAAAGCTTT TAAGCCTATA CTTTCTACCA GAAGCTTGAA	180
GGGTTTGGTT AAGAATATTC CCCAAAGCAC TGAGATACTA AAGAAATTGA TGACAACNAA	240
TGAGATTCAG AGTAACATT ATACATGATC TTAAACATTG TTTTGTAGTG TATATTACTT	300
GTCCATTCTT TTAAGGGGAG CAGCCTGCAC TCTTTTGTAG ATTACTTTTG GGGGATATAT	360
TTTGAGAATG ATGAAACGG	379

(2) INFORMATION FOR SEQ ID NO:749:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCGGCC TTCATGGCCT AGGCGCAAGG CCGAGCGTTC CCAGCAGGGG GAGAAACCCT	60
TCACACCCCA GGCCCTTCAG GAACTGGGGC CTTGCCTTGC AGCCACATGG CCCCATCCCA	120
GTTGGGGAAG CCAGGTGAGC TCTGACCCTT GGGCCTGGGC CTCTGCCCCCT CCCAACCAG	180
CCCTCGTCTC CCTCGACAGC GCCCTGCTG TCTTCCCCAC CGCAGTCACC ACCACCCGAA	240
ATGCCACGTG GTCACTGTGC ACTGCCCTGT TCATGTGCCT CTGCGGGGCA GGGCCTTCCT	300
GGTTTTGTTC ACTGCTGTAC CCAGATAGCC TCGAG	335

(2) INFORMATION FOR SEQ ID NO:750:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GCAAAGACCC AAGAACTGAA TATGCTCCGG GAACAGACCA CTGGGCTGGC AGCTGAGTTG	60
CAGCAGCAGC AGGCTGAGTA CGAGGACCTT ATGGGACAGA AAGATGACCT CAACTCCCAG	120
CTCCAGGAGT CATTACGGGC CAATAGTCGA CTGCTGGAAC AACTTCAAGA AATAGGGCAG	180

GAGAAGGAGC	AGTTGACCCA	GGAATTACAG	GAGGCTCGGA	AGAGTGCGGA	GAAGCGGAAG	240
GCCATGCTGG	ATGAGCTAGC	AATGGAAACG	CTGCAAGAGA	AGTCCCAGCA	CAAGGAAGAG	300
CTGGGAGCAG	TTCGTCTACG	GCATGAGAAG	GAGGTGCTGG	GGGTGCGTGC	CCGCTATGAG	360
CGTGAGCTCC	GAGAGCTGCA	TGAAGACAAG	AAGCGTCAGG	AGGAGGAGCT	CCGTGGGCAG	420
ATCCGGGAGG	AGAAGGCCCG	GACACGGGAG	CTGGAGACTC	TCCAGCAGAC	AGTGGAAGAA	480
CTTCAAGCTC	AGGTACATTC	CATGGATGGA	GCCAAGGGCT	GGTTTGAACG	GCGCTTGAAG	540
GAAGCCGAGG	AATCCCTGCA	GCAGCAGCAG	CAGGAACAAG	AGGAAGCCCT	CAAGCAGTGT	600
CGGGAGCAGC	ACGCTGCCGA	GCTGAAGGGC	AAGAAGGAGG	CGCTCGAG		648

(2) INFORMATION FOR SEQ ID NO:751:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GGAAAGAATC	TAAAAGAAGA	GAAGCGACCG	GTGCTTTTAA	GGGTGTCTAA	TTTTCAAAAG	60
AGACGTCTGG	GAGTATTTTG	CTCTGGGCGT	TTGGGTGAGC	AGGACCGGGG	CGTTGGAGGG	120
TGCGGCGGGC	TTGGGAGCAG	GGAAGGTTCC	GAGTCCTAGG	GAGGCGGCAG	CGCTCGGCTA	180
TGCCCTCTGG	AGACTGGCGG	GGCTGCGGGG	CCGAGGGGAC	CCGCGAGGGA	GCCGCGCTGC	240
GGACGCGCTG	AGCGCGGAG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

GAATTCGGCC	TTCATGGCCT	AGGATGTTTT	AAGGCTAGGC	CTGAGCGAGG	AGGAGGCAGG	60
GGAGACCTGG	CAGGTATTGA	AGTACCTGGG	AAGAAAGGCA	ATGGGGATGG	TGGTCCTGCT	120
CCAAGATGAT	AAGTGGAGGC	TGAGCGTCAC	TGGTACTGGG	GGCCATGATC	CCCAGGGCCA	180
CCCTGGCACC	AGGGTGCAGG	GGATGCGGGG	CCTGAGCAGG	AAGAACAGAG	ATCTGCGGGC	240
TGCACCGACC	CATCCCTGCC	CCTAGGCTGA	AGAACGGCAT	CACTCGAG		288

(2) INFORMATION FOR SEQ ID NO:753:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

GAATTCGGCC	TTCATGGCCT	ACTGAATTGG	CTTTTCTTGC	CTCTCTTTAG	TCACCTGTCA	60
CAGGAGGTTC	CTGCTCAGTA	ATGATATTGT	GAGTTAGGAT	AATAACTTTT	TTTTTTTTGT	120

```

GCTTCAGATT TAGAAGAAAA GATCCTGTTT CCATTTGAAA GGAAGTGTAA GCTTTTATCT 180
TTTAACCAAC TGAACAATAC ACCAAAAGCA GCCTAGGGAT GAGCATTTCT TTGAAAGCAA 240
TTAGGTTATT CACCTGGTAT TAAAACTATT TACTGTTAAA AAATCTGTGA CTTTCATGAAG 300
TTGATTTTAA AAGGCAGCAT CAAAACTGA AAAGGAAGGG AAAAAATAGG CAGCTTCTCT 360
GCACCTGTTT GGAGCTCCCC AAAACAGGAG CCATGGAGAA GTGGCATCAA GACCGGGCTG 420
CCCTTTCGAG AACACCTGT GGCAGTTCAG AGACACGCTT TTCCTACACT GCATGCAGCC 480
GCTCGAG 487

```

(2) INFORMATION FOR SEQ ID NO:754:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

```

GCTGGGTTTA GGCGATCCTC TTGCTTCAGC CTCCCAAGAA GCTGGAGCCA CAGGCATGCA 60
CCACCACGCC CAGTTAATTT TTGTATTTT TGTGGGGACG GGGTCTCACT TTGTTGCCCA 120
GGCTTATCTG GAACTCCTGG TTTCAGGCAG TTCTCCTTCC TTAACCTCCC AAAGTGCTGA 180
GATTATAGGT GTGTGTGAGC TATCACACCT GGCCTAGAAA ATTATAAGAA AATATTAAATC 240
ACATAATCTC ACTACCCATT GATGATTTAA CATCTAGTAT ATACATATGT ATATATAATT 300
TTAAAAGTAG GGTATATTA TATAATTACT TCATTATTCT TGTTTCCAC TTAATATACT 360
TAAGATATCT TTCAAAATCA CTAAATACAG GAACATAGTA TATCATCTTT CAGTAGCCTC 420
ATTGTATAGC TAACCCCTC GAG 443

```

(2) INFORMATION FOR SEQ ID NO:755:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

```

GAATTCGGCC TTCATGGCCT ATTGATTTC TGGGCTCAGG AGAGGATGGG GAAGGGGCTC 60
CAGACCCTCG GCGGTGCACT GTGGATGGGA GCCCCATGA GCTGGAAAGC CGTCGGGTCA 120
AACTCCAAGG CATTCTGGCT GACCTGCGGG ATGTGGATGG GCTGCCCCCA AAAGTGACTG 180
GCCCCCTCC TGGCACACCC CAGCCCCGGC CACATGAAGG TTCCTTTGGC TTCTCCTCAG 240
ACGTCTTCAT CATGGACACT ATCGGGGGCG GGGAGGTGAG CCTGGGGGAC TTGGCAGATC 300
TCACCGTCAC CAACGACAC GACCTCAGCT GCGATCTGTC TGACAGCAAA GATGCTTTTA 360
AGAAGACGTG GAACCCCAAG TTCACCCTGC GCTCGCACTA CGACGGCATT CGTTCCCTGG 420
CCTTCCACCA CAGCCAGTCG GCTCTGCTCA CCGCCTCCGA GGACGGCACG CTCAGCTCT 480
GGAACCTGCA GAAGCGGTC ACGGCCAAGA AGAATGCGGC GCTAGATGTG GAACCTATAC 540
ATGCTTTCCG GGCTCACAGG GGCCAGTGT TGGCTGGACT CGAG 584

```

(2) INFORMATION FOR SEQ ID NO:756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

```
GAAATTAAAA AAATAAAATC AAGTTCTTGG GTGGTGGGAA ATTGGCCTGT ATTTTCTTCTT    60
CTCAGTGGAA TTTGCTGAGT AAAAAATTAT AGGCTCAAAA ACTGAGAACT TTGAAGATAT    120
TGCACCATAT TCTTTTGTGA TTGAGTGTTG CTGATGAGAA GTCTGAGGTC AGTCTGTTGC    180
TTGCTCTTTC TAGGTAAACT GTGCTTTTTA TATTTTTCCT CCTCTAGAGG TTTTGAGAAT    240
TTACTCCTTA TCCATGTTAT TCTTAAATTT CACCACATTC TCGAG                      285
```

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

```
GAATTCGGCC TTCATGGCCT AGAATGCTTT GAATCCATAT CTTTTTCAGA AACATACATG    60
GAAATACAGA ACTACACCTG TAATTACAGA GGCATATGA ACCCTAGTTT GATAAGCCTT    120
GCTTTAAAGG ATGCAGTGTG TTCTATTAAA TGTATTAAAT ACAATTGCAG AAATGGAAAA    180
TGTGGACCTC CATTAAACAA ATTTTCTAGT TCCTAATGAG ATAACTTGG GACCAAACCG    240
ATTCTCTTG TTTTAGTGCT CAAAAATAGT TTCATTTTA GGTATTTATG CTTTAGTGGC    300
CTTTCTCGAG                      310
```

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

```
GAATTCGGCC AAAGAGGCCT AAGAAAAGAA AGCAAGAACA GAAAACGAAG CCACAGGAAG    60
GGAAGTAGAC ATTGTATGCT TATGGTTTCT CATTATGAAG GTGCAGCTTG TAGGAGGTTT    120
GTACGGATGT GCTTTGAAGT TATGTATATT ACATATAACA GGAAAAATA TAAAAATAAA    180
CAGTGCTGGT CTCGAG                      196
```

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

```

GAATTCGGCC TTCATGGCCT ACAGCAAATC TGCCTTCACA TGGTCTGCAT TCTAGTGGAG      60
AAGTCAGATA GAGGTAAGTA CGAAGACCAC AAAGCAGGTT AAAAAGTAAG GTGGGAAAGG      120
GATGCTATTT TAGACAAGGT GGTCAAGGCA AGCCTCTCAG AAGAGGGGAT AAGTGCTCAG      180
AGACCTGACT GAAGTGAGAG TGAGCTATTG ACACGGAGAA GGGCATTTC AACTCTGAAG      240
AGAAAGCAGG GGCAGGCTTT GGAGGGAGAG CTTGTTTATG TAGACAAGGA GGGGCAAAGA      300
GTCTTGTGGA TAAAGCAGAA TGAACAAGAG TAAATGGGAT TGTAATGAA ATGACTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

```

GGACATATGC AGTCAAAAGT AGGTGCCCAT ATATATAATG AAATACCAA AGGACAATTT      60
AGAAGGTTGA ATGGAAACAT TATGGCATGC TTTAGACGTT CTGTTTGGT TTTCTTATTC      120
CCAGTCTTTG ATCTTTTAGG TCTATCCATT GGTAAAGATA TATTAGGACT CACATCAACT      180
CAAGGTCTCG AG                                     192

```

(2) INFORMATION FOR SEQ ID NO:761:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

```

GAATTCGGCC TTCATGGCCT AGTTTATTGC TCCCAACTAT ACATCTTCAG ACTTCACTTA      60
GCATGTTACG GGTGGTTAGG TTCCAGGATT ATTGAGATCT ATTTCTACTC ACAATTGCTT      120
ATAAAATGAA ATCTATCGTC ACCTTAATTG CCTGTGCCTA AAAATATAGC ATGCTTGTCT      180
TGTGGGAAAT ATTCAAGCCTG GTATGTGAGT GACTGAAATG CAACTCCGTG GAAACACCCC      240
AACTCCACAC ATTCATCCCC TTGGTAACTC AGCACAGTCA CAGAACTGA AGAAGTAAAA      300
TGATCCTCTT TATTTGGCTT CTCGAG                                     326

```

(2) INFORMATION FOR SEQ ID NO:762:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

```

GAATTCGGCC TTCATGGCCT ACTGGCCCAA GTGAACTTT TAACAGGCTT TTTGGAGATC      60
TCTTTAGCTA GATCCAAAAA TTCATCAGGT ATATTTTCTG TTTTCCAAGT TCATGCAGGC      120
AATAGCTTTG CTAATATATA ATACTAGTTG CCTTGTCAA GCTGCCATAT CAGTTTCATC      180
ACTCCTTTCC CAGTGCCAC TCGAG                                     205

```

(2) INFORMATION FOR SEQ ID NO:763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

```

GAATTCGGCC TTCATGGCCT AAAAATGAAT ATATTCCTAT CCTATATTAA GACACTTTCC      60
CTAACCTAAA AGTTTATTCT GTTTTAAAAA TAAATGAAAG TATTTGTATG GGCCCTGGGC      120
CTGACGGAGA TATGCCCTGC CCCCTCTCTA GAGTGCTGGG AATTCTCAGG TGACCCAGTC      180
CCACAGGCAG CCAAGTGCCC ACACATTTC AGGCTGCCCT CCACCAGGC AGCGACCTCG      240
GGTCACCAGG GACACGCACA CCTAGAAAGC CGTGGGCTCC TCGAG                        285

```

(2) INFORMATION FOR SEQ ID NO:764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

```

AATTCTTTAT CATTTAGAT ATTAAGGATT TCAGATTTTA AGAGTTATCA GTGAAACTGT      60
GTTACAAGAA TATTTTGTTT CTGAGACATC TCAGTATTAT AGGTGGCTTC AGACTAACAG      120
GCACAGAATA GGATAGTGTG AAGTATCTGA TTAGCTTTAC TGTACTTGGT ACCTTTAGGA      180
CGTTCAGCCA GAGGTGATTG GAGGGATTTG CACGTCTACC ACTCGTGTGT GTATCTGTGA      240
ACCATATCTC CTTTAGTGCC TGCTTTTGAA CTTTATATA ACAGAATGAT GCTGCCTGTT      300
TATCTCTATA ATTTTCTTCT TTCCCTAGC ACGTGCTCAC TCGAG                        345

```

(2) INFORMATION FOR SEQ ID NO:765:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 100 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

```

GAATTCGGCC TTCATGGCCT AGAGAATGTT TTCATGTTAC TTATACTAAC ATTAGTTCTT      60
CTATAGGGTG ATAGATTGGT CCAATTGGGT GTATCTCGAG                        100

```

(2) INFORMATION FOR SEQ ID NO:766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

```

GGATTGAATT CTAGACCCTG CCTCGTCATT GTGGAACCCA TGGAGCAGTT TGATGATGAA      60
GATGGCTTGC CAGAGAAGCT GATGCAGAAA ACTCAACAAT ATCATAAGGA AAGAGAACAA      120
CCACCACGTT TTGCTCAACC TGGGACATTT GAATTTGAGT ATGCATCTCG ATGGAAGGCT      180
CTTGATGAAA TGGAAAAGCA GCAGCGTGAG CAGGTTGATA GAAACATCAG AGAAGCCAAA      240
GAGAACTGG AGGCAGAAAT GGAAGCAGCT AGGCATGAAC ACCAATTAAT GCTAATGAGG      300
CAAGATCTAA TGAGGCGTCA AGAAGAACTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

```

GAATTCGGCC TTCATGGCCT AGATAATATT TTATGTTTAT TGTGTGTTAG ACTGTGTTGA      60
AGTGGAAACT TTGGAACATT GTTGAACCA GTAAGAATCC CATTCCCTCAG GTATCAGGTC      120
GTAAAGTAG TTAAAATAA CGTATTCCTT AATTTTCCTC AGCAGGTTCC CCCTCCCTTT      180
AACTTGTGTG TATAAATAA TGTGTGTGAT GTTTCTCTT ACAAAGATAG TACTCGAG       238

```

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

```

GAATTCGGCC TTCATGGCCT AGGGATCCCA CCTTTTACAT CCTAGGTGTG AACAGATTCA      60
AATCCACTAT TCCTCCAGAT TTTATAGATG AGGAAACCAA GGTGCACAAG AGGGATTTTT      120
TTGTTTGTG TTTTGTGTTT GTTGTTTTT GAGACAGGAT TTGCTTTGT TGCCAGGCT      180
GGAATGCAGT GGCACAAACA TGGCTCGCTG CAGTCTCGAA CTCCTACGCT CGAG       234

```

(2) INFORMATION FOR SEQ ID NO:769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

```

GAATTCGGCC TTCATGGCCT ACGGAATGAG AAGATGAAAA ATCAAATTAA GCAGATGATG      60

```


GATGTCTCTC GGACACAGAC TGCAATATCG GTAGTTGAAG AGGATCTAAA GCTTTTACAG 120
 CTTAAGCTAA GAGCCTCCGT GTCCACTAAA TGTAACCTGG AAGACCAGGT AAAGAAATTG 180
 GAAGATGACC GCAACTCACT ACAAGCTGCC AAAGCTGGAC TGGAAGATGA ATGCAAAACC 240
 TTGAGGCAGA AAGTGAGAT TCTGAATGAG CTCTATCAGC AGAATCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

CGCTGCGTGC TTGTGAGACT GCCTGTTCTG GGACCAGCCC CTGGGCTCTT CCACCAAGAT 60
 TTGGTGAGGG TCCCCCTCTG CCTCTCACAG AAGCCCCTGG CCCTGGACTG TCCTGGGGGC 120
 AGGGACACCT GTGGCTGGGG AAGGGATGGC CAACAGCGGG AAGCAGTTTG CGCCTGGTGC 180
 CTGATGATGG TGAACCACGA GACAGATGGA GACGGGAGTC AGGGGACCCT GGGGACCCCT 240
 CCAGGTCCAG TGACCTTTTC CCAGACAGGC ACTCTCCAGG CCTAGGACAG ACAGGGCCCC 300
 AACTCCTCAT CACCCCATGA CTTGGCCTGG AGGAACCTGG GGTGGGAAAC AAGTAGTCCC 360
 CCAACCTCAG AGGCCAGAAC CACAGGTGGG GGACAGGGAC CTCGACAGAG CTGTGCCTGC 420
 TCAACGCTCG AG 432

(2) INFORMATION FOR SEQ ID NO:771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

GGTGTGGCTT TGCCCGTAC GAGCGGCGCG CCATGGAGTT ACTGAAGGTC TCCAAGGACA 60
 AACGGGCCCT CAAATTTATC AAGAAAAGGG TGGGGACGCA CATCCGCGCC AAGAGGAAGC 120
 GGGAGGAGCT GAGCAACGTA CTGGCCGCCA TGAGGAAAGC TGCTGCCAAG AAAGACTGAG 180
 CCCCTCCCCT GCCCTCTCCC TGAAATAAAG AACAGCTTGA CAGAAGCCCT GGCTCTCCTG 240
 CTGTCCGTGG GTGGGTGTGG GTGTGTCGGG GGCCCGCAGT CCCCTGTCTG GTGCCCCGTC 300
 TGAGCCACAC CCTCTCCGGG TGCTGCCTGG TCGTGAATCA AAAGCCGTGG CCCGCCACCC 360
 CTTCCCGGGG CAGCAGGTGA GGAAGCCGCT GTACTCGAG 399

(2) INFORMATION FOR SEQ ID NO:772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 520 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

GAATTCGGCC TTCATGGCCT ACAAGAAAAA AGAAAAGAAA TCATTAACCC CAGCTGTGCC 60

```

AGTTGAATCT AAACCGGATA AACCATCGGG AAAGTCAGGC ATGGATGCTG CTTTGGATGA      120
CTTAATAGAT ACTTTAGGAG GACCTGAAGA AACTGAAGAA GAAAATACAA CGTATACTGG      180
ACCAGAAGTT TCAGATCCAA TGAGTTCCAC CTACATAGAG GAATTGGGTA AAAGAGAAGT      240
CACAAATTCCT CCAAAATATA GGGAACTATT GGCTAAAAAG GAAGGGATCA CAGGGCCTCC      300
TGCAGACTCT TCGAAACCCA TAGGGCCAGA TGATGCTATA GACGCCTTGT CATCTGACTT      360
CACCTGTGGG TCGCCTACAG CTGCTGGAAA GAAAACTGAA AAAGAGGAAT CTACAGAAGT      420
TTTAAAAGCT CAGTCAGCAG GGACAGTCAG AAGTGGTGCT CCACCCAAG AGAAGAAAAG      480
AAAGGTGGAG AAGGATACAA TGAGTGATCA AGCACTCGAG      520

```

(2) INFORMATION FOR SEQ ID NO:773:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

```

GAATTCGGCC AAAGAGGCCT AGTTTATTGT TTGCATATAT TTTATAGTGT AGAGATTAGG      60
CATTTTAATA AAATTTTAAA ATTTCCAGGA TCTTACAGAA TGCTTTTATG TTACAGCTTA      120
CTCCTCGAG      129

```

(2) INFORMATION FOR SEQ ID NO:774:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

```

GAATTCGGCC TTCATGGCCT ACACAACGGA AAGCTGTTTT TCTGATCGAG GCTCTCTGAA      60
GAGCATAATG CAGTCCAACA CATTACCAA AGATGAGGAT GTGCAGCGGG ACCTGGAGCA      120
CAGCCTGCAG ATGGAAGCTT ACGAGAGGAG GATTCCGAGG CTGGAACAGG AGAAGCTGGA      180
GCTGAGCAGG AAGCTGCAAG AGTCCACCCA GACCGTGCAG TCCCTCCACG GCTCATCTCG      240
GGCCCTCAGC AATTCAAACC GAGATAAAGA AATCAAAAAG CTAAATGAAG AAATCGAACG      300
CTTGAAGAAT AAAATAGCAG ATTCAAACAG GCTCGAG      337

```

(2) INFORMATION FOR SEQ ID NO:775:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

```

GAATTCGGCC AAAGAGGCCT AGTGAGCGCG ACCATCATGT CCATGCTCGT GGTCTTTCTC      60
TTGCTGTGGG GTGTCACCTG GGGCCCAGTG ACAGAAGCAG CCATATTTTA TGAGACGCAG      120
CCCAGCCTGT GGGCAGAGTC CGAATCACTG CTGAAACCTT TGGCCAATGT GACGCTGACG      180

```

TGCCAGGCCC GCCTGGAGAC TCCAGACTTC CAGCTGTTCA AGAATGGGGT GGCCAGGAG 240
CCTGTGCACC TTGACTCACC TGCCATCAAG CACCAG 276

(2) INFORMATION FOR SEQ ID NO:776:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

GAATTCGGCC AAAGAGGCCT ATGAAATAGA AGAAGGTAAA AATAAGGAAC AAGCAATAAA 60
CAGTTCAGAG AACATAATGG ACATCAATGA GGAACCAGGA ACAACTGAAG GTGAAGAAAT 120
CACTGAGTCA AGTAGCACTG AAGAAATGGA GGTCAGAAGT GTGGTGGCTG ATACTGACCA 180
AAAGGCTTTA GGAAGTGAAG TTCAGGATGC TTCTAAAGTC ACTACTCAGA TAGATAAAGA 240
GAAAAAAGAA ATTCCAGTGT CAATTAAAAA AGAGCCTGAA GTTACTGTAG TTTCACAGCC 300
CACTGAACCT CAGCCTGTTT TAATACCCAG TATTAATATC AACTCTGACA GTGGAGAAAA 360
TAAAGAAGAA ATAGGTTCTT TATCAAAAAC TGAAACTATT CTGCCACCAG AATCTGAGAA 420
TCCAAAGGAA AATGATAATG ATTCAAGCAC TGGTTCCACT GCTGATACTA GCAGTATTGA 480
CTTGAATTTA TCCATCTCTA GCTTTCTAAG TAAACTAAA GACAGTGGAT CGATATCTTT 540
ACAAGAAACA AGAAGACAAA AGAAAACATT GAAGAAAACA CTCGAG 586

(2) INFORMATION FOR SEQ ID NO:777:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

GAATTCGGCC TTCATGGCCT AGTTTATATA GAGTAGGTTT ACATAGAAAA GGAAAGTTCA 60
CTGAGATTTC TAGGTACAAG ATCTANCAAC ATGCACAAAC CAATATTGTT TATGTATAAC 120
AGCTTCAAAC AATTAGAAAT TGTAATAACC ATTATGAAAG TGATGAAAAT TGTATTGCTT 180
AGTATTCTAC CAAAATTATT AAGTAATTTT TTTTTTTTTT TTTNANACGG AGTCCCGCCT 240
GGGCCACAAG NGCNAAAATT TGTTTCNAAA AAAAAAAGA AAAGAAAGAA AAAAAATTGA 300
ACTCTCAATC CCTAGATGTA AAATCAACCT CGTGTCTCTG ATTTCCACCAG TAATTCATAA 360
CCACAACCTG TGTGTCTTGA AACTTACTA TGCTTGGCAT ACTTATAATT TTTATTTCAC 420
TTTATCTCTA AATTTAAGAT GAAGTTTCTC CTACTAACTC GAG 463

(2) INFORMATION FOR SEQ ID NO:778:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

GAATTCGGCC	TTCATGGCCT	AGCTGGGAGT	TACCTGNTAT	CCTGATGGTG	CCATGTGCTA	60
GCTGGGTGAC	AATAACCCAG	CCACCTAACA	TCTCAAAGAT	TGTTCCCTTT	TGTTGTGAAAT	120
AGGGATAGAG	TTGTCTACTT	CCCAGAGCCA	GATAGAGAAC	TTAAGAGATG	AATCTGAAAA	180
TACAATAGCC	TAAATAAATT	CAAGGAAACA	CTATTATCTT	ACTGGATCTT	TCCAGCAACC	240
ATGTTACTTT	TGGCTGGATT	TTGTATTTTC	CAATTTGTGA	ATGACACAAC	AAAGAGCTAG	300
GTAGGTTAAG	TAAATGGTTT	CAGATAATAA	GCCCAGTTAG	CCCAGACGTT	TATTTTCCAT	360
TTGCATAGAA	AATGAATGTT	TTATGCATAC	ATTTGTTTGC	CCAGGGCTAG	GATATTACTT	420
GCATATGATG	TTCTTATATA	ATTAAAAAAA	AGAATACAAC	CTCGAG		466

(2) INFORMATION FOR SEQ ID NO:779:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

GAATTCGGCC	TTCATGGCCT	AATCCACAG	GGAAATGGGC	AGACTGAACC	AGTCCAGGTG	60
GTGAATTTTC	CAAGAACATA	GTTTAAGTTG	ATTAAAAATG	CTTTTAGAAT	GCAGGAGCCT	120
ACTTCTAGCT	GTATTTTGTG	TATGCTTAAA	TAAAAATAAA	AATTCATAAC	CAAAGAGAAT	180
CCCACATTAG	CTTGTTAGTA	ATGCTCTGAC	CAAGCCGAGA	TGCCCATTCT	CTTAGTGATG	240
GCGGCGTTAG	GGTTTGAGAG	AAGGGAATTT	GGCTCAACTT	CAGTTGAGAG	GGTGCAGTCC	300
AGACAGCTTG	ACTGCTTTTA	AATGACCAAA	GATGACCTGT	GGTAAGCAAC	CTGGGCATCT	360
TAGGAAGCAG	TCCCTGGAGA	AGGCATGTTT	CCAGAAAGGT	CTCTGGAGGG	ACAAACTCAC	420
TCAGTAAAC	ATAATGTATC	ATGAAGAAAA	CTGATTCTCT	ATGACATGAA	ATGAAAAATTT	480
TAATGCATTG	TTATAATTAC	TAATGTACGC	AGACTCGAG			519

(2) INFORMATION FOR SEQ ID NO:780:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

GAATTCGGCC	TTCATGGCCT	ACTAGACCCC	CGCCACAGCA	GCCTCTGAAG	TTGGACAGCA	60
AAACCATTGC	TTCCTACCC	ATCGGTGTCC	ATTTATAGAA	TAATGTGGGA	AGAAACAAAC	120
CCGTTTTATG	ATTTACTCAT	TATCGCCTTT	TGACAGCTGT	GCTGTAACAC	AAGTAGATGC	180
CTGAACCTGA	ATTAATCCAC	ACATCAGTAA	TGTATTCTAT	CTCTCTTTAC	ATTTTGGTCT	240
CTATACTACA	TTATTAATGG	GTTTTGTGTA	CTGTAAAGAA	TTTAGCTGTA	TCAAACTAGT	300
GCATGAATAG	ATTCTCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

```

GAATTCGGCC TTCATGGCCT AAATGGGAAT CATCATTGCA TAACAAACCT AAAGAGAAAA    60
TGAGAACATT TACGAAGAAG AAACAGAGTT ACTGTACCAA GGGCAAAAAG AAAAGAAGGG    120
GGAAAAAATA TAAGTCCATA AAAGAAAAAC AAAAGGAATC CATGAGCCTG GACGACAAGC    180
CGTGGGGGAT GTAAGAAGGT TTGGAACCCA AAAGGCAAGT CTAATCAGCT GGGGTAACAT    240
GGCGAGGCAG TTCCACATGC TGAGACTTGT GGCTACCACA TAAAAAAGA CTGTGCATAT    300
TCTAAATGAC AGCAGTCCTG CAGTGACGTG GATATTCAC TAGAAGCTA TGCAGGCAGG    360
CGTGGGAAAA GCGAAGAGAT GTTGCACCAT GCAGCTGCAA TCTTTATGT TCTACTGGCA    420
CAACCGAAAA GAGTAATGTG GAAATTATCC AGAGAATTTA GGTGAGAAAA ACAGAAGCCA    480
TCAGATTTTC TCCTTTAAAT CTCAGAGGG GTATACACTC CCCTGGAAAA CCAAGTTGCC    540
TCTCTGCTCA CATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

```

GAATTCGGCC TTCATGGCCT AGGGGAGTCC TCATTCTGAC CTCAAAGAAA GGACTGTATT    60
GTCTGGCTCC ATAATGCAGG GGACACCAAG AGCAACAAC TAAAGCTTTG AAGATGGCCT    120
TAAATATCCC AAACAAATTA AAAGGGAAAG TCCTCCCATG CGAGCATTTG AAGGTGCCAT    180
TACCAAGGGA AAACCATATG ATGGCATCAC CACCATCAAA GAAATGGGGC GTTCCATTCA    240
TGAGATTCCA AGGCAAGATA TTTAACTCA GGAAAGTCGG AAAACTCCAG AAGTGGTCCA    300
GAGCACACGG CCGATAATTG AGGGTTCCAT TTCCAGGGC ACACCAATAA AGTTTGACAA    360
CAACTCAGGT CAATCTGCCA TCAACACAAA TGTCAAATCC TTAATCACGG GGCCTAGCAA    420
ACTATCCCGT GGAATGCCTC CGCTGGAAAT TGTGCCAGAG AACATAAAG TGGTAGAAGC    480
GGGAAATAT GAGGATGTGA AAGCAGGCGA GACCGTGCCT TCCCGGCACA CGTCAGTGGT    540
AAGCTCTGGC CCCTCCGTTT TTAGGTCCAC ACTGCATGAA GCTCCCAAAG CACAACTGAG    600
CCCTGGGATT TATGATGACA CCAGTGTCTC GAG

```

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

```

AAATGACACT GAATGACACG TTAGCCAAAA CTAACAGAGA ATTATTAGAT GTGAAGAAAA    60
AATTTGAAGA TATAAATCAG GAATTTGTAA AAATAAAGA TAAGAAATGAA ATATTAAAAA    120
GAAACCTGGA AAACACTCAG AACCAATAA AAGCTGAGTA CATCAGCCTG GCAGAGCAGC    180
AGGCAAGAT GAGCTCGCTA AGTCAGAGCA TGAGAAAGGT GCAGGATAGT AATGCTGAAA    240
TCTTGGCCAA CTACAGAAAA GGCCAAGAAG AGATTGTGAC ACTGCATGCC GAAATTAAG    300
CCCAGAAGAA GGAGCTCGAC ACAATACAAG AATGCATTAA GGTAAAAATAT GCCCAATTG    360
TCAGCTTTGA GGAGTGCGAG AGAAAATTTA AAGCAACAGA GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

```
GCAGAAAAGT CAGAACAATT TGAGGAGCTT CAAAGCATCC TTAAGAAAGG GAAACTAATC      60
TTTGAGAATA TTATGGAAAA ACTGCGAATC AAGTATTCCG AAATGTACAC CATAGTCCCT      120
GCAGAGATTG AATCCCAGGT GGAAGAATGC AGAAAAGCTT TAGAAGACAT AGATGAGAAG      180
ATTAGCAATG AAGTCTTAAA AAGCTCACCA TCATATGCAA TGAGGAGAAA AATAGAAGAA      240
ATTAACAATG GGCTTCATAA TGTTGAAAAG ATGTTGCAGC AGAAAAGCAA AAATATTGAG      300
AAAGCTCAAG AAATTCAAAA GAAATGTGG GACTCACTCG AG                          342
```

(2) INFORMATION FOR SEQ ID NO:785:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

```
GAGATAATGG ATGAAAGGAT TCAGAGGAAA GTAGAGAAAC TAGAGCAACA ATGTCAGAAA      60
GAAGCCAAGG AATTTGCCAA GAAGGTACAA GAGCTGCAGA AAAGCAATCA GGTGCTTTC      120
CAACATTTCC AAGAACTAGA TGAGCACATT AGCTATGTAG CAACTAAAGT CTGTCACTTC      180
GGAGACCACT TAGAGGGGGT AAACACACCC AGACAACGGG CAGTGGAGGC TCAGAAATTG      240
ATGAAATACT TTAATGAGTT TCTAGATGGA GAATTGAAAT CTGATGTTTT AACAAATTCT      300
GAAAAGATAA AGGAAGCAGC AGACATCATT CAGAAGTTGC ACCTAATTGC CCAAGAGTTA      360
CCTTTTGATA GATTTTCAGA AGTTAAATCC AAAATTGCAA GTAAATACCA TGATTAGAA      420
TGCCAGCNGA TTCAGGAGTA TACCACTGCT CTCGAG                          456
```

(2) INFORMATION FOR SEQ ID NO:786:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

```
GAATTCGGCC TTCATGGCCT AGGGGTGAGA GTGTAGACGG CTTTCCAGT TGTATCCAAG      60
GCAGTCAGAC AGGGGGATT TGGGCTGTGT GTGCCCCAGC GCTGCAAGGT GGCCAACAGC      120
GACGGCGGTC GGGGGACACC TGCACTGAGA GGCTCCCCCTC TCAGCACACT CGTCTCGCTT      180
CCCTCAGGCT TTGGCTGATT TGGATCTGGT TGCTGAACTT CCAACAATTC CTCAAAATCA      240
TCCACAAAGA ACTCCTTCAG TGGAGGGGCGC TTTGGCCTCT TCAGGGTGTT CAGAAGCTGC      300
TGGATTTTGG AGGACACTCT GCTGTTTACA GGGACACCAT CTGCTGTTTC CAGCATGCTC      360
CCGCTGCACC CCCGAGGAAC ACTTCTCACA GAAGCCACCT GTGGACGCTC AAAGTACGAA      420
TGCTCCACGA GGCCCGTGGT GACATCAGGA GGGGCAGAAT GCAGATCTAT GTGGGTGTGG      480
GCCTCGAG                          488
```

(2) INFORMATION FOR SEQ ID NO:787:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

```

GAATTCGCCT TCATGGCCTA AGTGTCCGGA ACATATGTCA TGATTCTATG TCCAAACAAC      60
AGGCCAACCC TCAGGACAGA CCCCGCCACC CCCCTTCTCT GCAGCTCCTG GCAGGGACGG      120
TGCACAGTGG TGCCGTGTGC AGGGGGCCAG CGCAGCCACT GGCATCTGG GGCAGCGCTG      180
GTCGCCTGGC CACCTCCTTG CTGGGGCCGC TGGGCCTCCG GCCTAGAAGG ACAGGAAGCC      240
ATCCACCTCA AGGCGCAGGA AGGGGTCCAG CAGGGCCCGG AGCTTCCAGA TGGTGGCAGC      300
GCTCAGCAGG GGCGGCACCA GCCCCTCGAA GGGCCTGGGG TTCACCATGT ACACGTAGGC      360
GACCAGCAGG GTGCCAGCA GCAGCCTCAG GATCAGCAGC CTGAGAATCT CCAGCTGGAT      420
GTCCTCCATC TGGTCCCTAG ACCTGCCTCG AG                                     452

```

(2) INFORMATION FOR SEQ ID NO:788:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

```

GAATTCGGCC TTCATGGCCT ACAGGACAGA GGCAAATAGT AGACAAAGGT GAAGCCAAAG      60
GCATAATTAA GGAAGGAAGA ACGATATTAC CAAAAGATGA AACTGAAAAG AAAGTCTTAA      120
CTGTGTCAAA TTCTCAAAAT GAAACTGAAA TTGAAGTTCC ATCGTCCGCA GTTCCAGAAC      180
ACAGAATGTA TGAATAATCAA AGTCAGGTGG TTCTTGTAGA AAACCTTCAT GTTAACAAAA      240
CAAATGAAAC AATCAGACAT GAAAATAAAC CGTATGTTCC TAGTTCAGCA CAAATGACAA      300
GAAGGAAATT CCAAAGGCT AAGCCAAAT TGGGAAGAGC ACACAGTAAG AAAGAGGAAC      360
CAGTTTTAGA AAAAGTCACA AACTCGAG                                     388

```

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

```

GCCTGAAGAC ATCAAAAAGG AGGCAGCCCG GGCTTCTAGG AAGATCTGCT TTGTGTGCAA      60
GAAAAAGGGA GCTGCTATCA ACTGCCAGAA GGATCAGTGC CTCAGAAACT TCCATCTGCC      120
TTGTGGCCAA GAAAGGGGTT GCCTTTCACA ATTTTGTGGA GAGTACAAAT CATTTTGTGA      180
CAAACATCGC CCAACACAGA ACATCCAACA TGGGCATGTG GGGGAGGAAA GCTGCATCTT      240
ATGTTGTGAA GACTTATCCC AACAGAGTGT TGAGAACATC CAGAGCCCGT GTTGTAGTCA      300
AGCCATCTAC CACCGCAAGT GCATACAGAA ATATGCCAC ACATCAGCAA AGCATTTCTT      360

```

CAAATGTCCA CAGTGTAACA ATCGAAAAGA GTTTCCTCAA GAAATGCTGA GAATGGGAAT 420
TCATATTCCA GACAGAGATG CTGCCTGGGA ACTCGAG 457

(2) INFORMATION FOR SEQ ID NO:790:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 582 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGCGGCAGCG GCTCTTCAAA GCGGAGCCCG GAGTTTTTGC 60
 TACAGTTTTC GCCACCATGA GTCGCAGCTA TAATGATGAG CTGCAGTTCT TGGAGAAGAT 120
 CAATAAAAAC TGCTGGAGGA TCAAGAAGGG CTTCGTGCCC AACATGCAGG TTGAAGGTGT 180
 TTTCTATGTG AATGATGCTC TGGAGAAATT GATGTTTGAG GAATTAAGGA ATGCCTGTCC 240
 AGGTGGTGGT GTTGGTGGCT TCCTGCCAGC CATGAAACAG ATTGGCAATG TGGCAGCCCT 300
 GCCTGGAATT GTTCATCGAT CTATTGGGCT TCCTGATGTC CATTCAAGGAT ATGGGTTTGC 360
 TATTGGGAAC ATGGCAGCCT TTGATATGAA TGACCCTGAA GCAGTAGTAT CCCAGGTGG 420
 TGTCCGGGTT GACATCAACT GTGGTGTCCG CTGCTAAGA ACCAATTTAG ATGAAAGTGA 480
 TGTCCAGCCT GTGAAGGAGC AACTTGCCCA AGCTATGTTT GACCACATTC CTGTTGGGGT 540
 GGGGTCAAAA GGTGTCATCC CAATGAATGA CAAAGACTCG AG 582

(2) INFORMATION FOR SEQ ID NO:791:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 468 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAATTCGGCC TTCATGGCCT ACATTTTCTG AGAAAGGTTT GGATGACTGA AATATTTCTT 60
 CTACAGTCAA GGACTTTGGC ATGTGGTGGC TGAAACTGAG CTTTTTTGTG TGGGCTCCAG 120
 TTCTCACTGT TCTGCAATGC TCATGGCAAAG TTGAATGGTG AGCTAGCTTA TAAATTAAAG 180
 AGCTCTGAAC TGTATTCAGA CCGACTGGGT ATCTAGCTTA CTGTTTTAAC ATCATTGTGT 240
 AAACCAGACC CTGTAGTCCA GTGGTGTGTC CCTGTTGTGC AAAGTGTCTC TTTTCTCGT 300
 GTTTTGTAA AGAGCTTCCA TCTGGGCTGG ACCCAGTTCT TGCACATACA AGACACCGCT 360
 GCAGTCAGCT AGGACCTTTC CGCCATGTAT TCTATTCTGT AGTAAAGCAT TTCCATCAAC 420
 AATGCCTAAT TGTATCTGTT ATTTTGGTT TAACACACAC TGCTCGAG 468

(2) INFORMATION FOR SEQ ID NO:792:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 519 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:


```

GAATTCGGCC TTCATGGCCT ACGTGGCTAT AACTGGAAAA CTGGATCCGA AATCGACCAG      60
TAAACTGGGT AGCTCGGTCT ACGCCCCGCC CACCACCCTT GCTAGCCAAT AGCCTTCACA      120
ACTCTTCTGC CACTCCCGCC CATTCCAGTG CTGTGCCGCT GCTTTTCTT CCACTCGGAT      180
CTCTTGAGCG CCCTTAGCCC GCTGTATACG CGCCCTCCT CGGCTTCAGT AGGCAAGAGG      240
GCCATCTGCC CTTCCTTCTT GAAGGTAGAG GGGACAACAC CAGCTACGAC GGGGACTCCA      300
GAAGTCCATC TCCCGAACAG CAGCGGGGCG AAAAGAAAGA AAAAGGGTTT CCGAAGACTC      360
CTACTCACAC CCACGCTTTC CCTTAACCCG GAAGTGATT CCGCCCTCC TCTCCCTCTT      420
CGGTTGATAC TGGAGGAGAA GGACGGCCAG GTCTGGCCCG GCATGCCCTG GGCTTCGGT      480
GACCTCTGGC CTTTCTGT CGTCCACTCT CCGCTCGAG      519

```

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

```

GAATTCGGCC AAAGAGGCCT ACAGAAACAT CCAATTCTCA AACTGAAGCT CGCACTCTCG      60
CCTCCAGCAT GAAAGTCTCT GCCGCCCTTC TGTGCCTGCT GTCATAGCA GCCACCTTCA      120
TTCCCCAAGG GCTCGCTCAG CCAGATGCAA TCAATGCCCC AGTCACCTGC TGCTATAACT      180
TCACCAATAG GAAGATCTCA GTGCAGAGGC TCGCGAGCTA TAGAAGAATC ACCAGCAGCA      240
AGTGTCCCAA AGAAGCTGTG ATCTTCAAGA CCATTGTGGC CAAGGAGATC TGTGCTGACC      300
CCAAGCAGAA GTGGGTTTCA GATTCCATGA ACCTCGAG      338

```

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

```

GAATTCGGCC AAAGAGGCCT ACCAGGATGG TCTCAATCTC CTGACCTCAT GATCTGCCTG      60
CCTCGGCCTC CCAAAGTGCT GGGATTACAG GCGTGAGCCA CCGCACCCCG CCCTAAACCC      120
TAGGTTTGA CTTCTGTAAG AAGGAAAGAT TTAACAACAA AAACAAACAT TAAATTACAA      180
CCATAATAAA CAAAAAACA CTAACTAAA TTACAACCAT AATAAAATCT CCCAAAGTCC      240
GTAGGCACTG ACATATTACA GCCTTGCCAA ATCAGAATAG ATTTCTCATG TGTTGTCAAT      300
TTACCAGACA CAAAGAGTAG CTCAGATCTC ATAGACTCTT CAGATCTTGT AGACTAATTT      360
CAAGTCTTTT TAAAGTTTGT AAAAACATGT GCTATTGGA ATTACGTCAT CCTCGAATAT      420
TAAACCTGAG CTCAAAAACC TATTGTTTGA TATTGGAAAT AGTTAACTCC AGTTTCTTTC      480
TATTAAGATA AAATTCTTTC ATCATGTCTG TGCCCTCTAA AATAATACTC CTATTGCTTT      540
GTCTTCCCCT TCTCCCCTCC TAGTCCTTCT TTAGTCATT CATTAGAAT CAAGTCGCTC      600
ATGAGTTTAA GAATTAGAGC AGCAAGAAAT TGGGCTAGAG ATGTACAAA GCTTTGGACA      660
ATAGTAGTTT TGCTTGCTCT CATTCTTATT AGAAGTGCTG TTAATTTACT GATAAATTCT      720
AGGACGGAAG ACAAACTTTT GCAACTGGTA CTCGAG      756

```

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

```
GAATTCGGCC AAAGAGGCCT ACCAGGAAGC TCTCCTGCTT GTCATGAAGT GAGAACAATG      60
AAAAGTCATA GCAGATACTC AGTTTAACTC TGTGTAGAAC CTATTAGTGT TTGAGCTGTT      120
ATTCAGATTG GAATTCAGAC TGTGTGTTGT TTGCTTATGG ACACTGCCTG TCGTTCTGTC      180
ACTGTTAAAT TAATGAGTCT ATAAGGTTTT TCTTCCAGAG GCCATAGGTG ACATCACTAA      240
AATTGCAAGA TAAATGTAA TCTTTGNTGN TGCTGCACTC CCCAACCTCT CCCCCACCCC      300
CCGTGGTGTG CTGCTTTCTA GATGAGCGTG TTTTGGAGCA GGCCCATCTG GGACACTCTA      360
TGCTTTCACC AAGGAAGTGC GATCTGAGCA GCCACAATCC AGCCAAAAGA GGATCGTAGA      420
TATTGCTCTG GATCAACTAG ATGAAAATAT AGCAGAATGG ATTTAGCCCA CTGCTCTGTT      480
TTATCCAACT GAGTCTCTGA CCAGCAATTG GTGCATAATT ATTACAGCAA AAGTTAAGAA      540
ATGAAACTGT AGCAATTATG TAAATGAATG TGTGGCCTC TTAATACCTG TTAGTAGTGG      600
ACTTCCTGTG AGGAAGTTAG TTTTGTGTTT TGATGAAATG CTCTCGAG      648
```

(2) INFORMATION FOR SEQ ID NO:796:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 610 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

```
GAATTCGGCC AAAGAGGCCT AAGAGGCTGG CCCAGTCCC AAGGAACAAG AGATGGTCAA      60
GTCGCTAGAG ACATATCAGG GGACATTAGG ATTGGGGAAG ACACTTGACT GCTAGAATCA      120
GAGGTTGGAC ACTATACATA AGAACAGGCT CACATGGGAG GCTGGAGGTG GGTACCCAGC      180
TGCTGTGGAA CGGGTATGGA CAGGTCATAA ACCTAGAGTC AGTGTCTGTG TGGTCTTAGC      240
CCATTTCAAG ACCCTGCCAC TTGGAGTGA CCCCCTCTAC TCTTCTTAGC GCCTACCCTC      300
ATACCTATCT CCCTCCTCCC ATCTCCTAGG GGACTGGCGC CAAATGGTCT CTCCCTGCCA      360
ATTTTGGTAT CTTCTCTGGC CTCTCCAGTC CTGCTTACTC CTCTATTTT AAAGTGCCAA      420
ACAAATCCCC TTCCTCTTTC TCAAAGCACA GTAATGTGGC ACTGAGCCCT ACCCAGCACC      480
TCAGTGAAGG GGGCCTGCTT GCTCTTTATT TTGGTCCCGG ATCCTGGGGT GGGGCAGAAA      540
TATTTTCTGG GCTGGGGTAG GAGGAAGGTT GTTGCAGCCA TCTACTGCTG CTGTACCCTA      600
GAAGCTCGAG      610
```

(2) INFORMATION FOR SEQ ID NO:797:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

```
GAATTCGGCC AAAGAGGCCT AGCCACTATC CTGGTTACTT GTGGATTAC CAAGCAGTCC      60
AGCAAGTCAT CCGTAGAAAT GAATGTTTGA GGAGTCGTAG TAGTATTGGA GGCAATCTGT      120
TCCTCAATTG CATTTTCACT GTTGCTCATT ATTTGTTGTC TCTTGGCACA ATGCAATTTT      180
CCAAAGTGTT CTCCTCCTT GTCCACAAAG TCTTTCCCAT CACTTCCAAA TATGCCTCCT      240
```

CTTTCTGAAG GCGGTTCTTC GGACCTCTGT GCTACAGGGA CTCGAG

286

(2) INFORMATION FOR SEQ ID NO:798:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

GAATTCGGCC AAAGAGGCCT AGTTTTTTAT TGGTTTGGAG ACTAGAGCCA ATAGTATAAT 60
 GTTCTCAAAG GAAACAGACT TGAGTTGTTG GATTAGAGGA ACTAACCCAA CTTATATGAT 120
 TTTTTTTTGG TTTTGTGCGT GTAGTTATGG CACTAGTCTC GAG 163

(2) INFORMATION FOR SEQ ID NO:799:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

GAATTCGGCC TTCATGGCCT AGAGGGAATG CGGAGAGGGG TGGAGAAATT CCATCTTTGT 60
 TAGGGCAGCA GTCAAGGATG AGTGAGTTAG CCTCTTAAGG AAGAGGCTAA GCTGTTAGAA 120
 TAAAGAGGTT TACAACATCA GCGGCTTAAA TCAAATAGAA GTGTGTTTCT CTTTCACATG 180
 ACAGAGTAGA TGTGGCCTGG CATCTAGAAA GCATATTGT CTCTGCTCCA CTGTGTCTTC 240
 CAGGGACCCA TTCTTCTCTT GTCTTCATGC TCCATCACTT CCTAGGGTGT TGTCTACACC 300
 TGCATAGCCA TAGCTAATTT TCCATTCTCA GCACCAACCA GGGGAAGAGG AGGAAAGGTA 360
 GCCTCCTTTT CATGATAGGT GTGAAGTTAT GCAGGACACT CTCAGGGTGA ATGGACCACA 420
 GTGTGGCTCC TCCTGGGCTC GAG 443

(2) INFORMATION FOR SEQ ID NO:800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GCATGTGCAG CGGCAAAGAG AACCCGGACA GTGATGCTGA CTTGGATGTG GATGGGGATG 60
 ACACTCTGGA GTATGGGAAG CCACAATACA CAGAGGCTGA TGTATCCCC TGCACAGGCG 120
 AGGAGCCTGG TGAAGCCAAG GAGAGAGAGG CACTTCGGGG CGCAGTCCCTA AATGGCGGCC 180
 CTCCCAGCAC GCGCATCACA CCTGAGTTCT CTAAATGGGC CAGTGATGAG ATGCCATCCA 240
 CCAGCAATGG TGAAGCAGC AAGCAGGAGG CCATGCAGAA GACCTGCAAG AACGGTCGAC 300
 TCGAG 305

(2) INFORMATION FOR SEQ ID NO:801:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

```

GAATTCGGCC AAAGAGGCCT AAACACTCAA ATTTTACATT TTGAGCAGTA TTTACGCCTG      60
AATTAATTCA CAAGTTTCAA GGTCACTAAC TTTGGTTATA TTATATTATT ATTTTCCAAT      120
TTAGCCACCT CTTTATTGTG ATAATAGAGC ATACAGCAGC ACATAAAACG CAAAACCTCTA      180
GGACATAAAA AGTGGCATTG GGACGATGTT GCTCTGAAAT TTATGCATTA ATTAAACCGG      240
TATATATGTA TGCATTAAAT AAACCAATAT TTATGAAGTT CCTACTGTGT TACAGACGTG      300
GATCCAGGCA CTGAGGATGC AGCAGGCCAT CCAAATATAA AGTTACTTCC TTAGGAAGCT      360
TCCATTCTAA TGGGAGAGTG TTGTTAAAGA GATATATAAT AATATGTAAA ATGAATCCAT      420
AATGGTGAGT ATTATGAAGA ATAAATTGTC CAGGTTTCTC CGAG                                464

```

(2) INFORMATION FOR SEQ ID NO:802:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

```

GAATTCGGCC AAAGAGGCCT AATCTTCTGC CTGTTCTGAA AAAGCTTTGC TTCTTGTGAT      60
TTGTATCAGC AGGGGGAAAG GTCCTTACTG TTTTCCAGA CCTACAGTTG TGATAGAGGC      120
TCCTCCAGC CCCGCCACA GACCCCAACA GTGCCCTCTC TCACAAATGG ATTCTGGGGC      180
TTGGTCTTTA TTTTGTGTTT TGTTGGGGGC AGCATATGGA ACCCAAAAAT AGTATCATAG      240
CCTAAATTTG GAGCTTTGTG CCAGCCTTGT CTGTAGGATG ACCCGTGTGG GTCTCACCTG      300
GTGACTGGGA GTCCACAGGG GTCAGTTAGT AGCAGGGAGC TGCAGGGCGC CTGTCAGCAG      360
AGACCGTCTC ATTCCCCAAA CCCAGGAGCC AGAGGAACTG ACGCCCGGAT AAATGCCCAA      420
GCCGCCCCGG GTGGGATTAG TCGTCTACCT TCCCAGAAAT ACACCCCTCC ATCCTGTGAC      480
TTGGATACAG TTTACTGATG AAATTAGGGA ACCTCCTGCG CCTTACCAAG AAGCTGTGGC      540
TGGAACCTAG TCAATGAAAA ATGATTGTA AACTCTTTGG AGCTGGCTTT GAAAGAATGT      600
TTAAATGAT AGCTGATACT GCCAGACAAC AGAACAGGCC GGCCCTCGAG                                650

```

(2) INFORMATION FOR SEQ ID NO:803:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

```

GAATTCGGCC AAAGAGGCCT AAGAGAACAG GAGCATTACA GTAAAATTCC TAAGTAGCCA      60
ACTGATTGTC AGTGCCAGAA ATGAATACCG ATCCAATCGA G                                101

```

(2) INFORMATION FOR SEQ ID NO:804:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 723 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

```

GAATTCGGCC AAAGAGGCCT AGCTCTCTGT ACCCAAGGAA AGTGCAGCTG AGACTCAGAC      60
AAGATTACAA TGAACCAACT CAGCTTCCTG CTGTTTCTCA TAGCGACCAC CAGAGGATGG      120
AGTACAGATG AGGCTAATAC TTACTTCAAG GAATGGACCT GTTCTTCGTC TCCATCTCTG      180
CCCAGAAGCT GCAAGGAAAT CAAAGACGAA TGTCTAGTGT CATTGTATGG CCTGTATTTT      240
CTCCGCACTG AGAATGGTGT TATCTACCA AGCTTCTGTG ACATGACCTC TGGGGGTGGC      300
GGCTGGACCC TGGTGGCCAG CGTGCATGAG AATGACATGC GTGGGAAGTG CACGGTGGGC      360
GATCGCTGGT CCAGTCAGCA GGGCAGCAAA GCAGACTACC CAGAGGGGGA CGGCAACTGG      420
GCCAACTACA ACACCTTTGG ATCTGCAGAG GCGGCCACGA GCGATGACTA CAAGAACCCT      480
GGCTACTACG ACATCCAGGC CAAGGACCTG GGCATCTGGC ACGTGCCCAA TAAGTCCCCC      540
ATGCAGCACT GGAGAAACAG CTCCTGCTG AGGTACCGCA CGGACACTGG CTTCCTCCAG      600
ACACTGGGAC ATAATCTGTT TGGCATCTAC CAGAAATATC CAGTGAAATA TGGAGAAGGA      660
AAGTGTGGA CTGACAACGG CCCGGTGATC CTTGTGGTCT ATGATTTTGG CGACATCCTC      720
GAG                                                                                   723

```

(2) INFORMATION FOR SEQ ID NO:805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

```

GAATTCGGCC TTCATGGCCT ACGGCCAAAG AGGAGGAGAT GGCGCCAGTC AGGGAGCGGC      60
CGTGGCCCGC ACAGTGAGGA AGCGCGAAGG CGGAGCAACC GAGGAATCCT CCGGAGAAGA      120
ATCAGAGCCG TCGCTACCGC CACTACCGCC ACCACCATGG AAGGAGCAAA GCCGACATTG      180
CAGCTCGTGT ACCAGGCAGT GCAGGCGCTT ACCACGACCC AGATCCCAGC GGAAAGGAGC      240
GCGCCTCTTT TTGGCTTGGG GAGCTGCAGC GTTCGGTTCA TGCATGGGAG ATCTCAGACC      300
AGTTGTTACA GATCCGGCAG GATGTGGAGT CATGCTATTT TGCTGCACAG ACCATGAAAA      360
TGAAGATTCA GACCTCATT TATGAGCTCC CCACAGTACT CTCGAG                                406

```

(2) INFORMATION FOR SEQ ID NO:806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

```

GAATTCGGCC TTCATGGCCT ACGCCCGGGT TGAAGTGTG CAGTCAATGA GCTCCCGCTC      60
CTCCTGGATC CGTCTGTAGG TCTCCCGGT GTGCATGAGC AGCTCACTCA CTGGCTTCTT      120
TAGGTGTTCT CTGAGGGCTT CCTGCTGCTT CTTCGCGAGG GCTGTGTAC GCTGCCAGTT      180

```

```

TTTCAGAAAG TTGTGCTGAG GAGGTGGGGC CCAGGGAGGT CTCTTCTCTT CTTTGGGGC      240
TTTTTGCTTT GACTCTCCTT CAGCAGAGAT GAGGGTCATC AGACAGGGTG AGGTAGGTAT      300
CCGCTCAGCC AGCTGGGTGT TCCCTCGAG                                     329

```

(2) INFORMATION FOR SEQ ID NO:807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

```

GAATTCGGCC TTCATGGCCT AAGGTACTTT AATCAGTCTA AATACTTGAA CATTTTTATT      60
TCAGTGGTAA AAAATAGACT GAGGCAGAGT GAAGTTATAA ATTAGAATCT AAAAATTAC      120
CCTTCAACAT TAATATTTT TAGTGCTCTA ATATAAAACA CAGAAAACCT ATCTCAAATA      180
TAAAAGATGA ATATAAAAT ATTAATTAAA CAACTGGCGC TCGAG                          225

```

(2) INFORMATION FOR SEQ ID NO:808:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

```

GAATTCGGCC TTCATGGCCT AACTTGCTCT TCTGTTTCTA GTTTTATAAA GTGAAAGCTG      60
CAATCATTGA TTAGAGACAG TTCTACGCTA AAGTCATAAT GACATTTTAT GTAATTTCTT      120
TTTTCTTTT TTTGAGACAG AGTCTCGCTC TGTGCTCAG GCTGGAGTGC AGTGGAGTGA      180
TCTCAGCTCA CTGCAACCTC TGCCTCCCAG GTTCAAGCGA TTCTCCTGCC TCAGCCTCCC      240
GAGTAGCTGG GATTACAGGC CCCACCAAC TCGAG                                  275

```

(2) INFORMATION FOR SEQ ID NO:809:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

```

GCGATTGAAT TCTAGTTGCC TACCTACCAA ACTACCTACT GAACTTTTTA ATTTGAAGAT      60
ATTCTTCCTG GACTACTTGT TTATAGTTTA TTAAATGAAC TGCTCTATTT CTAAAACTT      120
TATTTTTAAA GTCCTTTCCC GTTTAGAATG CGGCATACTC TTGCTTGTTG GGTATATATC      180
TCTGATCGTG ATAACCTACCT ACCGAAAACC TTTCATGGCT CCTTGCCAAC TACAAAATTG      240
CGATATCCTC GAG                                           253

```

(2) INFORMATION FOR SEQ ID NO:810:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGC CGACGCGGGG AGAGACAAAA    60
AAGAGAAAAGT CTTTGAAAAG CACAAGGAGA AGAAGGATAA AGAGTCCACA GAAAAGTACA    120
AGGACAGGAA GGACAGAGCC TCAGTGGACT CCACGCAAGA TAAGAAAAAT AAACAGAAGC    180
TCCCCGAGAA GGCTGAAAAG AAGCACGCTG CCGAAGACAA GGCTAAAAGC AAACACAAAG    240
AGAAGTCGGA CAAAGAACAT TCCAAGGAGA GGAAGTCCTC GAG                      283

```

(2) INFORMATION FOR SEQ ID NO:811:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

```

GAATTCGGCC AAAGAGGCCT AGGCTTCCAC CCAGGAAATG ATCCAGAGCC TCTTTTATGT    60
TATGTTTTTT GTTTGTTTCT TTCAAGACAA TCGATCAAGC CAGAGGCATT CCCCACCCTT    120
CAGCAAGACA CTTCCTAGTA AGCCCAGCTG GCCTTCAGAG AAAGCAAGGC TCACCTCCAC    180
CCTGCCGGCC CTGACTGCTT TGCAGAAACC TCAAGTCCCA CCCAAACCCA AAGGCCTCCT    240
TGAGGATGAG GCTGATTATG TGGTCCCCGT GGAAGATAAT GATGAAAAC TATTCATCC    300
CACAGAAAAG CTCGAG                      316

```

(2) INFORMATION FOR SEQ ID NO:812:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

```

GGGATGCATA GATTAGTTC TGCCTCACAG GCAGGTAGCC TGAGCTCCTA GGGGGAAGTG    60
TTTTTGCTAA GTAGGGAATG AAAAGCATGT TTATTTAAGC ACAAATTAA ATCTCTCCTA    120
TTTTTATATG ATTTCCCGTT GTTTTCTTCC CTGTAGGGAA ATCTGCTGTG ATAGAGAACT    180
GCGTAACAGG CCTTTTCTGT GAGCGCTCAC TCATACATTA TGCACGACGT GGCTAAGATC    240
TTTGATGGCA CTCGAG                      256

```

(2) INFORMATION FOR SEQ ID NO:813:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

```

GCAAGCGGCG CATGCAGGAG GAGAAGCAGA AGTCTGTCAA CGTCAAGAAG ACCATCCTGG      60
AGATGCGCTA CGGGGCTGAT GTGGATGCCG GCTCCATTGT GCACGCCGCC CAGAAGCTGG      120
GCGAGCCTCC CGTGTGCCCC GTATCTCGCA TGGCCTCCAT CCCCTCCATG ATCGGGGAGA      180
AGCTGCCCCAC CGCCAAGGGG TTGGAGGCCG GGCTGGACAC ACCCAAGGTA GCCACCAAAG      240
GCAACTATAT CGAGGTGCGC ACAGGCGCCG GCGGGGACGG TCTGGCTCGG CCCGAGGATG      300
ACCTCCCGGA CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

```

GAATTCGGCC TTCATGGCCT ACGAACTCCT GACCTCAAGT GATCGGCCTG CCTCAGCCTC      60
CTAAAGTGCT GGGATAGCCA CTGTGCCAG CCTAGCCCTT CTTCAAATGT TTGGTAAAAT      120
TCAGCATGTA AGCCATCAGG TCTTGGGCTT TTTGCTGGGA GATTTTTTAT TATGGCATCA      180
ATCTCATTAC TTGTTACTGG CCTGTTTAGG TTTTCAGTTT TTTTCATGGT CAATCTTGGT      240
AGGTTGTTTG TGTCTAGGAA TGTATCTGTT TCTTCTAGGT TTTCCAGTTT CTTGGCGTAT      300
AGTTACTCAT AGTAGCCACT AATTATCCTT TGGATTCTG CGGTATTGGT TGTAGTGTCC      360
CCATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCAAGCCTAT CTTTGTAGTCT      60
TCCTAGAAGC ACCGTGTTCT GTGGAATCA GCATCAGCAG CTTTGCTGAG GACTCCCCCA      120
TCTTCCTTTC CTTCCCGGA AAGCACAGAC CTAAGTGAGT CTTCACTGGA TCCCAGCTAA      180
CAGCTTCTGC CCATTCTAT CTTCCACAG AGCCAGTGGC AGCCCCAGCT GCAGCAGCTA      240
CGTGACATGG GCATCCAGGA CGATGAGCTG AGCCTGCGGG CCCTGCAGGC CACCGGTGGG      300
GACATCCAAG CAGCCCTGGA GCTCATCTT GCTGGAGGAG CCCCATGAAC TCCCTGCTTC      360
CCCTGAACCC CCAGCACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

```
GCCACGGTGC TCATTCAGAC TACCCGTGTG CCCAAGCAGG TGGCAGTACC CGCGACAGAC      60
ACCACTGACA AGATGCAGAC CAGCCTGGAT GAAGTCATGA AGACCACCAA GATCATCATT      120
GGCTGCTTTG TGGCAGTGAC TCTGCTAGCT GCCGCCATGT TGATTGTCTT CTATAAACTT      180
CGTAAGCGGC ACCAGCAGCG GAGTACAGTC ACAGCCGCCC GGA CTGTTGA GATAATCCAG      240
GTGGACGAAG ACATCCCAGC TGCAACATCT CGAG                                274
```

(2) INFORMATION FOR SEQ ID NO:817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

```
GAATTCGGCC TTCATGGCCT AAAAAATAC ACCTGTGGTC CCAGCTGCTC GGGAGGCTGA      60
NTTACGAGAG TCCCTTGAAC CTGGGAGGCG GAGGTGTCAG TGAGCTGAAA TCATGCCACT      120
GCACTCCAGC CTGGGCAACA GAGCGAGACT CTGTTNAAAA AAAAAAAAAAT AGCGAGAGAT      180
CGAGAGAGAG TGCACGTGAG AAGACTAGTA GTTGCTATGG ACTGGGGGAG AAGGAACGGG      240
TTACAGGGTT TCTTTTGGGG ATAACGAAAA TGTTCTAAAA CTGGACTGTG GTGATAACTG      300
CACAACTCTG TGAATGTACT AAAAATACT GAACTGGCCG GCGCGGCAG CTCGAG      356
```

(2) INFORMATION FOR SEQ ID NO:818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

```
GAATTCGGCC TTCATGGCCT AGGCAGGGTG TCAACTTATT TAATTCTAAA AATAGTATAT      60
TCATAGAGAT ACTATCATCC TCATTTCATA TATTCAAAAA ATTCAAAGAA GTTAAGTAAA      120
TTGCCAAAAG TCACCCAGAT AATAAGTAGA AAAGATGGTA ATGAAATCCA GGTGGCCCTT      180
CGAG                                184
```

(2) INFORMATION FOR SEQ ID NO:819:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

```

GAATTCGGCC TTCATGGCCT ACAACAACAA CAACAAAAAA ACATCATCCG GGAAGCTTT      60
TCAATATCCT GACGTTGGGT CTCTCCAGTG TAGATGGAAA TATGGAATTG GGAATAGACA      120
TCGATATTTT TGGAGGTCCC CAGGGGTTAC CAATGTGCAG ACAGGTTTGG GAACCACTGC      180
ATTAGGCATT TTACATTTAT TTAGGGCTTT CACTGGATTT GTCACCCCAT ACTTTCATAA      240
TCCATTTTTT CTGATTTTTT TTCTGGTTTT TGGTGAGGGT ATAGTTGGGA TGGGGTTTTT      300
TTTTTTGTCC TCCCACCGCT CGCCCCATC CAGTGTGGAC GTA CTCTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:820:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 167 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

```

GAATTCGGCC TTCATGGCCT ACTCTTCTCT TGAAGAATTT GTTGAAGACT TCAGAAGTGA      60
TGCTGGCTGC TTTCTTCATT AGGTTGAGCT CCCCATCCTC CTTTACAGCG ATGGTATATG      120
CCACAACTGC ACTGATATCT ATTTGTCAA AGCCTTCAGG TCTCGAG      167

```

(2) INFORMATION FOR SEQ ID NO:821:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 733 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```

GAATTCGGCC AAAGAGGCCT AGCGAAATAA AACAGGGGAG TCAGCAAAAC CAGAAATTTT      60
AGCAATGTCA GCTCATGACA AGGCTGCATT ATCAGAAGAG GAACTGGAGA GGAAGTCGAA      120
ATCTATCATT GATGAATTTT TACACATTAA TGATTTTAAG GAAGCCATGC AGTGTGTGGA      180
AGAGCTGAAT GCCCAGGGCC TACTACATGT TTTTGTGAGA GTGGGAGTGG AGTCCACCCT      240
GGAAAGGAGC CAGATCACCA GGGATCACAT GGGCCAACTA CTCTATCAGC TGGTACAGTC      300
AGAAAACTC AGCAACAGG ACTTTTCAA AGGTTTTTCA GAAACTTTGG AATTGGCAGA      360
TGACATGGCC ATTGATATTC CCCATATTG GTTGACCTT GCTGAACTGG TGACCCCAT      420
GTTAAAAGAA GGTGGAATCT CCATGAGAGA ACTTACCATA GAATTTAGCA AACCTTTACT      480
TCCTGTTGGA AGAGCTGGGG TCTTGCTATC TGAAATATG CACCTACTAT GCAAACAAAT      540
GAGCCATAAG AAAGTGGGAG CCTTATGGAG GGAGGCTGAC CTCAGCTGGA AGGACTTTTT      600
ACCAGAAGGA GAAGATGTAC ATAATTTCT TTTGGAGCAG AAGTTGGA CTATAGAGTC      660
TGACAGTCCC TGTTCCTCTG AAGCACTTTC AAAGAAAGAA CTGTCTGCCG AAGAGCTGTA      720
TAAGCGACTC GAG      733

```

(2) INFORMATION FOR SEQ ID NO:822:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

TGCCAGATAG	TTCTGCAGAA	GAAATCACTG	TTTGTCTGA	GACACAGGTA	AGTTCCTCTG	60
AAACTTTTGA	CCTTGAAAGA	GAAGTCTCTC	CAGGTAGCAG	AGATATCTTG	GATGGAGTCA	120
GAATAATAAT	GGCAGATAAG	GAGGTTGGTA	ACAAGGAAGA	TGCTGAGAAG	GAAGTAGCTA	180
TTTCTACCTT	CTCATCCAGT	AACCAGGTAT	CCTGCCCCGT	ATGTGACCAA	TGCTTTCCAC	240
CCACAAAGAT	TGAACGACAT	GCCATGTACT	GCAATGGTCT	GATGGAGGAA	GATACAGTAT	300
TGACTCGGAG	ACAAAAAGAG	GCCAAGACCA	AGAGTGACAG	TGGGACAGCT	GCCCAGACTT	360
CTCTAGACAT	TGACAAGAAT	GAGAAGTGT	ACCTCTGTAA	ATCCCTGGTC	CCATTTAGAG	420
AGTATCAGTG	TCATGTGGAC	TCCTGTCTCC	AGCTTGCAAA	GGCTGACCAA	GGAGATGGAC	480
CTGAAGGGAG	TGGAAGAGCA	CGTTCGCTCG	AG			512

(2) INFORMATION FOR SEQ ID NO:823:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

GAATTCGGGC	CTTCATGGCC	TACTCTCATC	TGTATCTGTT	TCCTCTAACT	TTACTGAAAA	60
GATAGAATTC	ATTAAGCATG	AATTCTACCA	TCTTCTCCCT	ACTACAGCTC	TGTCAAAAAG	120
ATGTTGCTCT	CTGAGCCCAA	CTCTCCCTCA	GTCCCCAGGA	TTCTGTCCCT	GTCCACCTTT	180
AATCTTTTCC	TTTCTGATT	TTATGTTATA	AGTTATTTAG	ATTTGATGA	GAGATAATCG	240
TACCTAGAGT	ATGGGAGAAC	TATTTAAGGT	TTACAGGTTG	GGTGGAAACC	TTGTATATAC	300
TAGATGSTAC	TGTGAGGGCT	TGCCACACTG	TCAGCCTTCA	TCTGAACAGA	GCAGAAAGTG	360
TTTCTGCATG	TTCAACCAAG	CCTGCTGGAC	TGTATCACTT	TTCTCTGTGG	GCCAAAACTC	420
GAG						423

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

GAATTCGGGC	TTTCATGGCCT	AGCGGCTCA	GATGAATGCG	GCTGTTAAGA	CCTGCAATAA	60
TCCAGAATGG	CTACTCTGAT	CTATGTTGAT	AAGGAAAATG	GAGAACCAGG	CACCCGTGTG	120
GTTGCTAAGG	ATGGGCTGAA	GCTGGGGTCT	GGACCTTCAA	TCAAAGCCTT	AGATGGGAGA	180
TCTCAAGTTT	CAACACCACG	TTTTGGCAAA	ACGTTTCGATG	CCCCACCAGC	CTTACCTAAA	240
GCTACTAGAA	AGGCTTTGGG	AACTGTCAAC	AGAGCTACAG	AAAAGTCTGT	AAAGACCAAG	300
GGACCCCTCA	AACAAAAACA	GCCAAGCTTT	TCTGCCAAAA	AGATGATCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

```

GAATTCGGCC AAAGAGGCCT AGGAGTAAGG ATGCAGAAAT GATTGCAGCA TATTTTCATT 60
TCTACGCAAG GATGTTCTC GGAAATGGAG GCGACATTGC TGCCTGCTTT TTTGAGGGAA 120
TTGATGATGT TCACTGGAAG GAAAATGGGA CATTAGTTCA AGTAGCAACT ATATCAGGAA 180
ACATGTTCAA CCAAATGGCA AAGTGGGTGA AACAGGACAA TGAAACAGGA ATTTATTATG 240
AGACATGGAA TGTAAGAGCC AGCCCAGAAA AGGGGGCAGA GACATGGTTT GATTCCTACG 300
ACTGTTCCAA ATTTGTGTTA AGGACCTTTA ACAAGTTGGC TGAATTTGGA GCAGAGTTCA 360
AGAACATAGA AACCAACTAT ACAAGAATAT TTCTTTACAG TGGAGAACCT ACTTATCTGG 420
GAAATGAAAC ATCTGTTTTT GGGCCAACAG GAAACAAGAC TCTTGTTTGA GCCATAAAAA 480
GATTTTATTA CCCCTTCAAC CTCGAG 506

```

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

```

GATGGAGCAG TTCCAGAAGG AGAAGGAGGA ACTGGACAGG GGCTGCCGCG AGTGCAAGCG 60
CAAGGTGGCC GAGTGCCAGA GGAAACTGAA GGAGCTGGAG GTGGCCGAGG GCGGCAAGGC 120
AGAGCTGGAG CGCTGCAGG CCGAGGCACA GCAGCTGCCG AAGGAGGAGC GGAGCTGGGA 180
GCAGAAGCTG GAGGAGATGC GCAAGAAGGA GAAGAGCATG CCCTGGAACG TGGACACGCT 240
CAGCAAGAC GGCTTCAGCA AGAGCATGGT AAATACCAAG CCCGAGAAGA CGGAGGAGGA 300
CTCAGAGGAG GTGAGGGAGC AGAAACACAA GCTCGAG 337

```

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

```

GAATTCGGCC AAAGAGGCCT ACAGGTACAG AATCATATGA ATGTTTCTTT CTTTCTTTCT 60
TTTCTTTCTT TCTTTCCTTC TTTCTTTCTT TCTTTTCTTG AGACAGAGTC TTGTTCTGTT 120
GCCAGACTGG AGTGCACTGA CTCATCTCA GCTCACTGCA ACCTCCACCT CCCAGGTTC 180
AGCAATTGTC CTCCTCAGC GAGGACCTGC CTCGAG 216

```

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

GAATTCGGCC AAAGAGGCCT AAAAAAAGA AGATGGGTTT TTTAAGTCCA ATATATGTTA	60
TTTCTTCTT TTTTGGAGTC AAAGTACATT GCCAATATGA AACTTATCAG TGGGATGAAG	120
ACTATGACCA AGAGCCAGAT GATGATTACC AACAGGATT CCCATTTCGT CAAAAATGTAG	180
ACTACGGAGT TCCTTTTCAT CAGTATACCT TAGGCTGTGT CAGTGAATGC TTCTGTCCAA	240
CTAACTTTC ATCATCAATG TACTGTGATA ATCGCAAAT CAAGACTATC CCAAAATATC	300
CGATGCACAT TCAGCAACTC TACCTTCAGT TCAATGAAAT TGAGGCTGTG ACTGCAAATT	360
CATTCATCAA TGCAACTCAT CTCGAG	386

(2) INFORMATION FOR SEQ ID NO:829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCGGCC AAAGAGGCCT AGCTGAATCC TAGATTTTCTT CTTCTCACTC AGAATTAAAG	60
CTGTTTTTCTT TACCAGAAAT ATTTAAGACT GTTAGTTTAA CTTCTAAGAA TAGCAGATAA	120
AGCGTATAGG TGTTTTGAGA TAACCGTATT CATAGGAAAA ACAACATAA AACTTTCATA	180
ATTTTGGGAA GAGTTACACA CAAAAATATC ATCATTGAAT AATTAGTACA ACAAAAATGC	240
ATTTGTTTGT CCTAAAGTT GAAATGAACA GAATCATGAT GGAATACTC GAG	293

(2) INFORMATION FOR SEQ ID NO:830:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCGGCC AAAGAGGCCT AATTGAATTC TAGACCTGCC TATGTCCTAT TCCCTGTGTC	60
CTGCAAGACC CCCTTGGTT TGGTTTTCTT TTCTTTCTT TTTTCTTTT TTGAGACTGC	120
GTCTTGCTCT GTCTCCAGG CTCGAG	146

(2) INFORMATION FOR SEQ ID NO:831:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GCGATTGAAT TCTAGACCTG CCTCTCATCC ACTATTGTCT TTCCCAATT TTTTCTAGC	60
CTTATCTTCC AGAATTCCTC TCAGACATAG GTGGCCCTGG TTGCTTGATC CTGTCTCTAA	120

GTTGGTCTTT CATGTTTTCT CTCCTCAGAT TGCTCGAG

158

(2) INFORMATION FOR SEQ ID NO:832:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC TTCATGGCCT AGCTGATTTA AATCTAAAAA CTGGATAAGA AGCTGTGGCT	60
TGTAATTAAA AATAGACCTT TATTCACCTAG ACCTACAGTT TGCTTTTTTC ATATGTAAAG	120
AAAAGTTTAA TATCCTGCTT CTCTATTTCG GTTCTAGGGG CACCACTATC AGTTAACCCT	180
AAAGATTCTT GTGGGTGAAA CCATTTTGAT TACCATCTTG CTCTGCTGCC AGTTATGGTA	240
ACCAAACTCT CTTTGTCTTCT GGATGCTAAA TCTGTCCACT TGTGCCTTAA CTACATCCTA	300
ACTCCCGTCA ACTCGAG	317

(2) INFORMATION FOR SEQ ID NO:833:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 339 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGGCC TTCATGGCCT AGCCCCCGGA GCCCACCACA GTCCCCAGAG TGTGATAAAA	60
ACAATTTTTA TACTTCTTAT CTCTTTCTAG TAGTCTACAT CCCATTCCCA GTCTTTCCAA	120
TCATAAAAT TGTAGTTTA TTTAGTTCAC ACTTGAACGT CCTATGAAAC TGTTTTAAAC	180
CTTTTACCTA TCTTGTCTTCT TGTCAATTAT CTTAAGCCAT TGATACAGAA ATCAGAACCA	240
AATTTAATAT TGTGTGGGT ATGAGACAGT TTCTGTCATG TTTTAATTTT TTCCTTAAAG	300
TTTACTATG TACTTCATAT ATACCGGGCA CTTCTCGAG	339

(2) INFORMATION FOR SEQ ID NO:834:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 396 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCGGCC TCATGGCCTA TGACTTTTAA GTTCTTATT AACTGAGAA ACACCTAACT	60
ATCCTAATAG AATTAAATTT CCCTAAGTTA TAAGACACTT GAATTTTTTA AAAAGAGATA	120
ATTAAATTC TCCTATATTT TATTTCATTT ATTTTTTCAG TCATGCTCCT TCTGTATCTC	180
CTATATTTTA TTATATTACT TACATGGCTT TATTTTTCACA ATAACCTCTT TTTTCCCTTC	240
TTTTATTAT TTGTTTATTT TTGGAAACAG AGTTTCCTTA TGCTGCCAC GCTGGTCCCTG	300
AGCTCAAGCA ATCTTCACGC CTCAGCCTCC CAAAATTATA GGACTACAGG CATGAGCCAC	360
TGTGCCTGGC CTAAGCCACT GCACCCGGCG CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

```

GAATTCGGCC TTCATGGCCT ACTTTTACTC ATGCATAATT TTGTAAAATC CTACATTGGT    60
CATTTGGAAT ATATTGATTC ACTGAGTAAT ACAACTCTTC CAAATGTTGA ATGTTTCATT    120
CTACAATATC AGAAACTCAA TTTGTTAATG TTAATACTAG TCTCATCAGA AATGTCTTTA    180
AGTATTGTTT AACTGGCAAA CTCATAGTGA CGACTACAGG CTTTCCAGAA TTTTCATTTT    240
CATTGGAAGT CTGAATTITA TCAACTATAA ATACTGTCAG TTGTTTCCCT CGAG          294

```

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

```

GAATTCGGCC TTCATGGCCT ACTCTGATAC TAACTGTAGT CTACATTTAT ACATTGTGTC    60
TGAATGCTGG TTTGTGGCT TCACTAGCTC CCTTTTCTC TCTCCTTTT TATCCTGTCT    120
TTTGCTGCTG CTTTCCACCT TCTGTCCAGC TCCATCTTCA GACAGCTCCC TGTATAACGC    180
TCCACTTCCT GAGTATTCCA GTTGCCAGCC TCCTTCAGCA CCTCCTCCAT CATAACGCTAA    240
AGTCATCTCA GCTCCAGTGT CAGATGCCAC TCCTGATTAT GCTGTAGTGA CTGCTTTGCC    300
ACCTACTTCC ACACCCCTA CACCACCACT GCGACACCCA GCGACACTCG AG          352

```

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

```

GAATTCGGCC TTCATGGCCT ACCGGACCTT GAAAATGGAA TGTTAGAGAA CACATGTGCA    60
AGGGAGCTGT GCCAAGCTCA TGTGCGAAC AGGCCTCCTG ATGAAGCTTC TCAGCGAGCA    120
GCAGGAAGCA AAGGCATTGA ATGTAGAATG GGATACGGAC CAACAAAAAA CAAATTATAT    180
TAATGAGAAC ATGGAACAGA ATGAACAGAA AGAGCAGAAG TCAAGTGAGC TCATGAAAGA    240
AGTTCCAGGA GATGACTATA AGAACAAACT CATCTTCGCA ATATCTGTGA CTGTAATACT    300
AATAATTTTG ATTATAATTT TTTGTCTTAT AGAGGTGAAT TCACATATGC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

```

GAATTCGGCC TTCATGGCCT AAAAAATCTA GTTGAGAAAA AGAAAGAAAC CAAGAAGGCT      60
AATCACAAAGG GTTCTGAAAA TAAAACTGAT TTAGATAATT CTATAGGAAT TAAAAAATG      120
AAACCTCAT GTAAATTTAA GATAGATTCA AACATAAGTC CGAAGAAGGA TAGCAAGAA      180
TTTACACAAA AAAATAAGAA AGAGAAAAAA AACATTGTTC AACATACTAC AGACTCTTCT      240
CTCGAAGAAA AACAAAGGAC ATTAGACTCA GGCACCTCTG AAATTGTGAA ATCTCCAGA      300
ATCGAGTGTT CTAAGACAAG AAGAGAAATG CAATCAGTGG TCAACTCAT AATGACAAGA      360
GACAGTGATG GTTATGAAAA CTCAACAGAT GGTGAAATGT GTGACAAAGA TGCTCTGGAG      420
GAAGATTCAG AAAGCGTTAG TGAAATAGGA AGTGATGAGG AATCTGAAAA TGAAATTACA      480
AGTGTGGTA GAGCTTCAGG TGATACGAT GGAAGTGAAG ATGATGAAGA GAAGCTCGAG      540

```

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 539 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

```

GAATTCGGCC TTCATGGCCT AGCATTTTCAT CTCTAAATTG GGGAGAATAG AAGCATCTAC      60
TTCATGTAGT AGCCAGGATT AGAAGAGGGA GGAATAACTG GGCCCTGGAT AGAATGTGAT      120
GAATGTATAT TCTTAATGAG AAGTGGAAT AATTGTGGT TGAGAGCTGT GCCTCAGATC      180
AGAGTGACAG GATACATGGC TAGGCTATAT TTTCCAGCAG ATTAAGAGCT GCAGCCCAAG      240
ACTCTGAAAT ATGAAGAAAA AAGGAGAAGA TGACAGCATA TCTTTTAAA GAAATATTTT      300
CCAGCCAAAT GGTGCAGCAG AGGACTTCCA GGAATTTGTT CTTGTTCTGT ATCAAAGGTG      360
AAGAGTTCGT AGCCTTCAAG GAAACAAGAA ACCATGGGAT GGAGTGAAGG AAGGTGGCCT      420
GGAACCAGCT GCTGAGCCTC TCTGAGCCCC AGTTTCCTCG TCTCTAAAAT GGGGCTGATC      480
TCCTCTCCCT CAGACTGTTG TTGCAGGAAT TAAACAGGT GTTGAGTGGG CTGCTCGAG      539

```

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

```

TTCCACAGCT CTGATATCA GTAACCCATG TGGAGAACAA AAGGATTTTG CTCCATGAAG      60
TCTAATTGCC TGCTGAATAA ATAAATAAAT AGATGAAGCA CTGCATGCAT TAAATGAAAAG      120
TAAATATTGA CCTGCCACC ATATGTTTGC TGGGGTGCTG GCTGAAGTGT GCTGGCAGGT      180
CCAATCAGTC AGAGTCTGCC AGCCAGCAA GCAGGAGAGA CAGGAATATC AAAAAGGCCG      240
TCCTGCTTGT GCCTTAATCT TTGTCCAACC CCAATTCCT CCACCACAGG CCTCGAG      297

```


(2) INFORMATION FOR SEQ ID NO:841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

```

GAATTCGGCC TTCATGGCCT ACCTTATTAG TGATTGGCGA TTCAGGCCAT GTCATAGGGC      60
CTTTCAGACA AAAGGTTCTT ATCCCAGTCA GCTGGCCAAA ACATTAACCT TGGATTCTTT      120
ACCCTGCTAC AGCATCTTCT AGAAAGGCAG CAAGATAATA TTGTGGCAGT GCACAGATAA      180
CATCAGGGTA GACTTGACTG GAGAAAACCA AATTCTGCGC TTGCTCCTGT GTGCCCCCAT      240
CCAGCTGTGC ATGCACACAC AGGACACCTT TCTAGTATGA AGAACTTGCA TCATGTCTGC      300
CCTCTATTGA GCACCCCTT CTAGAAATAC TTCCAAGTAT TAGCATGTGA ACTGTTGACT      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCTG ACTTATGAAT TCTTTCTGTG TGATCGTAAA      60
AGTGCAGAGT TTATTGCAAA GAGAACTTTC ATCTGAATCC TCAGCCTGGG AATCTTCCTC      120
TTCCACCGCC AACTCCTCCA CCCAGTCTGA GTCTACTTCA ATGGCCCGCT CTTCCCCATC      180
CGCACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

```

GAATTCGGGC TTCATGGCCT AAGCTCCGCG AGCCCCCTAC AACTCGTTTC CTTCCGTTCA      60
CCTTCGCAGG GCGGCGACTG GCGGCGCGAT GGACCTGACC GGGCTCCTGC TGGACGAAGA      120
AGGCACCTTC TCCCTCGCCG GCTTCCAGGA CTTACGTTTC CTCCCAGGAC ACCAGAAGCT      180
GAGTGCCCGG ATCCGAAGGA GGCTCTACTA TGGCTGGGAT TGGGAAGCCG ACTGTAGCCT      240
GGAGGAGCTC TCCAGCCCGG TGGCAGACAT TGCTGTGCGA CTGCTCCAGA AGGCAGCCCC      300
CAGCCCTATT CGCCGACTCC AGAAGAAATA CGTAGCTCAT GTGTCCCGGG AGGCATGCAT      360
CTCCCATGTG GCTATGATGC TGGCTCTGGT GTACATTGAA CGGCTCCGGC ACCGAAACCC      420
AGACTACTTG CAGCATGTGT CATCCTCTGA CTTGTTCCCTG ATCTCCATGA TGGTGGCCAG      480
TAAGTACCTC TATGATGAAG GGGAGGAGGA GGAGGTCTTC AACGACGAAT GGGGAGCTGC      540
TGGGGGTGTG GCCGTGCCCA CTCTCAATGC CTTGGAGAGG GGCTTCCTGA GTGCCATGGA      600

```

TTGGCATCTC TACTACTGAAC GCTCGAG

627

(2) INFORMATION FOR SEQ ID NO:844:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

```

GAATTCGGCC TTCATGGCCT ACCTGAGCTG CCGAAGCCGC CGTCCTGCTC TCCCGCGTGG      60
GCTTCTCTAA TTCCATTGTT TTTTITAGAT TCTCTCGGGC CTAGCCGTCC TTGGAACCCG      120
ATATTCGGGC TGGGCGGTTC CGCGGCCTGG GCCTAGGGGC TTAACAGTAG CAACAGAAGC      180
GGCGGCGGCG GCAGCAGCAG CAGCAGCAAT CTCTTCCCGA ACACGAGCAC CACAGGCGCC      240
CGAAGGCCGG AACAGGCGTT TAGAGAAAAT GGCAGACGAT ATTGATATTG AAGCTCTAGC      300
TCGAG                                     305

```

(2) INFORMATION FOR SEQ ID NO:845:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

```

GAATTCGGCC TTCATGGCCT ACCAGAAAAA ACTTACATTG AAGAGAGGAT TCCTTGTTTT      60
GACTATGTGT GTTCTGTCCG TCTTAGGCAG CCAACGTATT GGTTTACATG GATCTGGAGG      120
ATTATGCACA CTAGTGTGTA GTTTCATTGC AGGGACAAAA TGGTCCCAAG AAAAGATGAA      180
AGTCCAAAAG ATTATTACGA CTGTATGGGA TATTTTTCAA CCACTTCTTT TTGGTTTAGT      240
TGGAGCAGAA GTATCTGTTT CATCGCTTGA ATCAAATATT GTTGGCATAT CTGTTGCCAC      300
TCTAAGTTTG GCATTATGTG TTCGAATTTT AACCACATAT CTATTGATGT GCTTTGCTGG      360
TTTTAGTTTT AAGGAGAAAA TATTATTGCG TTTAGCATGC ATGCTCGAG      409

```

(2) INFORMATION FOR SEQ ID NO:846:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

```

GAATTCGGCC TTCATGGCCT AGGCACGGTA CATAcGATTA TTATAAACAT CAGCTGCGGT      60
TCTGGGAGTG AGCTTGTGTC GTGTTAGTGC CATCTCCCTG ACAAACTGTA CCTGTACCCA      120
CATCTCAGGC TGGGAAGGAG TAGCTGGGCC TCCCTTTAAT GCAGCGGCAC TGGTTTGGGT      180
CACAAGAGCT GGTTTGATCA ACCCCTGACT CCCCCTGGCG GGAGGTGCTC GTCACATCTG      240
GGAGCCTGAG CAGAGGTGCC GGGGCTTGG AAGCTGGAGA AATGATGGAT CTTTCTCCAG      300
GAGAAACAAT TCTTATCTTC ACATCNGCCC CGTGCTCCAA ATGAAGAGCG CGTTTGcATA      360

```

GCTGCTCGAG

370

(2) INFORMATION FOR SEQ ID NO:847:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

```

GAATTCGGCC TTCATGGCCT ACGCGCGGCC GAGCGGAGGC GGAGTCGGCG CCGAGAACAT      60
GGCTGGAGGC AAAGCTGGAA AGGACAGTGG GAAGGCCAAG GCTAAGGCAG TATCTCGCTC      120
ACAGAGAGCT GGGCTACAGT TTCCTGTGGG CCGCATCCAC AGACACTTGA AGACTCGCAC      180
CACAAGCCAT GGAAGGGTGG GTGCCACTGC TGCCGTGTAC AGTGCTCGA TTCTGGAGTA      240
CCTCACTGCA GAGGTGCTGG AGCTGGCAGG TAATGCTTCT AAGGATCTCA AAGTAAAGCG      300
TATCACTCCG CGTCACTTGC AGCTTGCAAT CCGTGGTGAT GAAGAGTTGG ATTCTCTTAT      360
CAAGGCTACC ATAGCTGGGG GTGGTGTGAT CCCTCACATC CACAAATCTC TGATTGGAAA      420
GAAGGACAG CAGAAAATG CTTAGAGGGA TGCTTAAACC AACCTCTTCC TTCCCCGTCA      480
TTGTACTGTA ACTGGGACCT CGAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

```

GAATTCGGCC TTCATGGCCT AAACAAGCAG AGGGACTCCC CAGATAGCTT CATACCCAGT      60
TTAGCTTTAT AACAAAGTGA GTTTTAGGCT CTGTCTTGGC ATACTTGAGA GCACAATGGC      120
TGCTTCAAAA CAGGCATTG AACTCGCTGT TTAATCAAAT TCTTCTTTAA TCTAAAGTGA      180
GTTTCTCATA GAGAGCATAT AACTTAACC CTTGAACAAT GTAGGGGTTG GGGTGGGGAG      240
TCAACCCCT GTGAAGTAAA AATTGCTAA TAACTTTTGA CTCCCCAGA ACTTAACAT      300
AAATAGCCTA CTATTGATTG GAAGTGTTAC CAACAGCATA CACAGTTAAC ATATATTTTG      360
TATGTAATAT GTGTTATCCA CTATATTCTT ACAATAAAGT TAGCAAAAGA AAAAAATGTT      420
ATTAGGAATC CTCGAG                                         436

```

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

```

GAATTCGGCC TTCATGGCCT ACATGAGCCC AGGAGTTGAA GGCTATAGCC TGGGTGACAC      60
AACAGGCCCC CATCTCTAAA AAATATATAA ATAAATAAAG TTAAGGATGC TGCGTGGTTT      120

```

```

ATATGTTCAG AAAGAGATTG AGGTAATAAA AGAGTTTTTG GCCAGGCTCT GGCTTACACC      180
TCGGCCTCCC AGAGTGCTGG GATTACAGGC ATGAGCCACC GCGCCCAGCC GGAAGTAGGT      240
TTTTTGAAGA GTCAGCTGAA AACAACTGTT GCCGTATTTC GAATTTAAAA TTTTAATTTG      300
AAAATATTAT AACTGAGAAA TTATTGTATA TATTTATGGT ATACAGCGTG ATGTTATGAT      360
ACATGTATAC AATGCAGAAAT GATTAAATCA AGCTATTTAA CATAGCTGTC ACCTCAAATA      420
CTATTTTGTG GGTGAGAAAT TTGAAATTA TTATCTCAGG AATTTTGAAA TGTACAATAC      480
ATTATTATTA ACTGTTCTCG AG                                              502

```

(2) INFORMATION FOR SEQ ID NO:850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

```

GAATTCGGCC TTCATGGCCT AGATAAAAAG AAACAAAAAA GAGAAGATAT GATAAGAGAA      60
CAGAAGATAT ACCATAAATA TTTGGCACAG AGACGTGAGG AAGAAAAAGC TCAGGAGAAA      120
GAATTGACA GAATATTAGA GGAAGACAAG GCAAAGAAGT TGGCTGAGAA GGACAAGGAG      180
CTGAGACTTG AAAAGGAGGC AAGGAGACAG CTTGTGGATG AGGTCATGTG TACAAGAAAA      240
CTTCAAGTTC AAGAAAAGTT GCAACGAGAA GCTAAAGAAC AGGAACTCGA G              291

```

(2) INFORMATION FOR SEQ ID NO:851:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

```

GGTCTGTAT TCTGTGGTT GGAGTGTCT ACTATTGTTG GGTGGAGTGT TCTATCTTCT      60
GTTGGGTGGA GTGTTCTGCT GTGTTGGGT GCGGTCTGTG ATATTCTGTT GTTGGGTGGC      120
GTGTTGTATA TTCTGTTGTT GGGTGGCGTG TTCTATCTTC TGTTGTTGGG TGGATGGATT      180
GTTCTGTATT CTGTTGGGTG GCATGTTCTA TCTTCTGTTT TTGGGTGGAG CGTCTATCT      240
TCTGTTGGGT GCGCATTCT ATATTCTGTT GTTGGGTGGC GTGTTCTGTA TTCTGTTGTG      300
GGTGGCTCGA G                                              311

```

(2) INFORMATION FOR SEQ ID NO:852:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

```

GAATTCGGCC CTTATGGCC TAGTCTCATC TCAGAGTACT CAGAGAACT ATTTTAAAT      60
CTCTAGATAT CAATCAATGA ATATTATTA TAAATACCT GCTATGTGCC AGATGGTGTT      120

```

```

AATTATAAGT TTGTTCTCTT TTTGTCGTGC TACTTAGGCT TTTATCATT TGTCCTATCA      180
TTAGGGAAGT GGCTCCNNNN CTTACAGCTA ATTTTITTTT CAATTTACTA ATGACTTTTT      240
GTGGAGGTGG GGATCTCTTC TGTTCACAT TTTCTATGAT TCATCTCAAT CCTCCAGTGA      300
TTATTAAAAA ACAGTTGCAG TAAGTTCAGT CATAGGGGCA CTGGAATGAG TCCTTAAAAAC      360
TTTATGCTGC TGCTTTTGCA ATGATGGATT GCCTGAGAAT TAAGGAAAGA TAACTACTCT      420
CTTGGTCACT GTATTTCCTA TCAACCATAT CCTCCCAGAA TATGATTTCT TCCCTCAGGC      480
ATTTTAGAAA AGAGACAAGA GACAGATTTT TTTTTCAGG CAATGACTCG AG              532

```

(2) INFORMATION FOR SEQ ID NO:853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

```

GAATTCGGCC TTCATGGCCT ACTTTTGTAT AAGCAACTAG TGGTCTCATT ATCAGAGGTC      60
CCTGAGGGGC CCTACAGGCC CCCCAGGTT CTGCCCCCAA GATTCTAAGA GAGACCTTGT      120
GCTAGGGGCTC TAGTCTTGAT GTTCTTTGCA TTGTTGGAT ATGAAGCCCA GGATATGTGG      180
GCACAATAAG GTAAATCATG AGATGTGAAG GAGAATGAAG ATCAGGCCAG AGGTCACCAT      240
TCATTGAAGA GCCAGAGAAA AAGAAAATTA GTGCACAGAT TTGTGTAGAT TTACAGAGAA      300
CTTCTATTG CTGCAAGAAC TTCATCAGGC GCTGCACCAT GCCTGATTG GAAAGGAGCT      360
TCTTTGGGCG CTGATAGAAC TGAATTAATA TGAAGAAATT GAAGTGGCTC TCGAG          415

```

(2) INFORMATION FOR SEQ ID NO:854:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

```

GAATTCGGCC TTCATGGCCT AGTAAAATTA GCTGAAAAAT AATTTTCCAA TGCAAATACT      60
AATGAGGGTT ATATGACCGT TGTCCAAAGC ATTTGCAGTG CTGCATGACA TTTGTCCTAA      120
AACCTGACTC TTA AACATT CCTGTGAAA ATAGAAATAT TCCCATGCCT AGATTCCAAA      180
TAATAAAAAGA CACTGAGAGT GTTTTCAAAA TTAATGGACT GATTTAAATT TCACTGGAAA      240
GCAGCTTTTT AAAACTAAAT TGTCTGGATG TGGCCTCCCT GTGATCACTT CCAACTGCTT      300
ACTGCCAACT TCTGGCGGCT CGAG                                          324

```

(2) INFORMATION FOR SEQ ID NO:855:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 616 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

```

GAATTCGGCC TTCATGGCCT AACGGCCTTC AGATGGAAGG AGGGCAGGTG CATATCTGTT      60
AGCAAAATCT TCACAATCAT CTTGAGTTTC TCAGCAAAGT CGGCCTGGCT GGAATTCCT      120
GGCGCTGCCA TGCTGAAGGT GACCAGCAAC ACAGCCCCCA GGATGGTCAG TTGTTCCAGC      180
TGCAACTGGA GCTCGTGGAA GCGAGACTGG TCCATTAAAA CTGTTTCGGG GAACGGCCTC      240
TGGAGGTGGT CCCACTTCAG AAGCTTCAGG TAAGCGTAAT TCTGGACAGC AACAGGCTC      300
AGCCTGGGCA TGTCCCCAGA GCCAGCAGCC ATTCCCCCA CTGGCAGGGC GTGTTTATAC      360
TTCTGAGTCA TAAGTCTCTC TGAGGCTTCT TCCAGCCACT GGGTGACAAA GTCCAGGGAA      420
TTTGGTTGCC TCTCCAAAT CTCTTGAAAC TTCTTCCTTT CGTATTCAAC TGACTGCTGC      480
ATGAGATGAG GCCTGATGCT ACTGATAGCA AAGTTGGCCA TGTCCACTTT CATTAGGTCC      540
AACACAGAAA AAATTTCTCT GAAAAGGGGC ACTATTTCCT TAATGTCCTT TAGTTTCTTA      600
ACTTCCTCAT CTCGAG                                     616

```

(2) INFORMATION FOR SEQ ID NO:856:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

```

GCTCTGGGTG AAAAGATCTC ACACCAATGT ACATAATGTG GCCATCCTTT CCATTTTCAA      60
GAAGTTGCCT TGCTTTGATA CTGCAAATTC AGTATTGTGA CACTGGGAATG ATAAAAAGAT      120
GTTCCACTTT CTTTTAGGCC AGAAGGCTTC CTCGTTGTGT GTGTGCGTGT GTGTCCCATC      180
CTATTGCCTG TTCTTTCTAA ATCTACATT TGTACCTTA TCCAATACTT GCTTTAGCAA      240
GAACATTATG GGGCCACCA TATTCCACAG GGCCATGCCA ACCTTTGGAA AAAAGGTAGG      300
TCAAGGAAGA AATCAGAACA AACCTGTGA CCATTCCACC TCCTTGCACT TTGGGCTTGG      360
GTTTGGAAC TGACCAGCAA GCTGGAGCTG CCACCACAGA GAAACATCAA AGCAAAAGGG      420
TCCAGGACC AGAGATTAGG TAACTAGCTA CAGGCCAGAG GAATGCTTCC CTCTCTAGAT      480
CAACAAGCAC CCTCGAG                                     497

```

(2) INFORMATION FOR SEQ ID NO:857:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

```

GTTCAATGGCC TAGATGCTGG TTTGTTTTTG TTTTCGTTTT TTTGAGACAG TCTTGCTCTG      60
TGACCCGGGC TGGAGTGCAG TGGTGCATC TCGCTCATTG CAACCTCTGC CTCCCAAGTT      120
CCAGCAAGTC TCCTGCCTCA GCCCCCACC GAGTAGCTGG GACTACACGC AAGTGCCACC      180
ACGCCAGCT ACTTTTGTA TTTTAGTAG AGATGGGGT TCACCATGTT GGCCAGGCTG      240
GACTCGAATT CCTGACCTCG AG                                     262

```

(2) INFORMATION FOR SEQ ID NO:858:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

```

GAAACTATAA TCATCAGTAC TGTAATGAGC AATTATGAGG CCTACAAGCC TTCCACAGGA    60
GCTATGGGAG ATCGACTAAC GGCAATGAAA GCAGCTTTCC AGTCACAGTA CAAGAGTCAC    120
TTTGTTGCAG CCAGTTTAAG TAATCAGAAG GCTGGAAGTT CTGCTGCTGG GGCAAGTGGG    180
TGGAAGTAGT CAGGGAGCTT GAATTCTGTT CCAACTAACT CAGCACAACA GGGCCATAAC    240
AGTCCTGACA GCCCCGTCAC CAGTGCCGCC AAGGGCATCC CAGGCTTTGG CAATACTGGC    300
AACATCAGTG GTGCCCCGTG GACCTACCCG TCTGCCGGAG CCCAAGGAGT CAACAACACA    360
GCTTCAGGGA ATAACAGCCG AGAAGGGACT GGGGGCAGCA ACGGGAAAAG AGAGAGATAT    420
ACTGAGAACC GGGAACTCGA G                                441

```

(2) INFORMATION FOR SEQ ID NO:859:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

```

GAATTCGGCC TTCATGGCCT ACTGGTCGCC AATGTGCTGC AGGTCATGGC TCCGGAATCA    60
AATTGGGCTC AAACGGGGCA AGCTCCAACA CAGTGGAGCC TGGCGTACT CCCACCTCCA    120
CCTTGCGGAT CTCAGAGCTG CAGGATGGCT CTGCCACCG CACCCTGAGC TGGCCCCGCT    180
TGGGGCTGGC ATTGGGGGAC AGTGTGTTCT GGGCGTCTCT GCTCCTCTCT GCTGGTGCCT    240
GTGCCTCTGC TGGCCGCCCA CTCATAGATG TCAGAGCCAC AGGACGGCCC CGCAGAATCC    300
CTGCCCGAC CCTGCCGGGG GCTGGCTTTG GTGCACATGC AACTCGTCAT CGTGGTCCCC    360
ATGGGCACCT CTGCTCTTCT CGAG                                384

```

(2) INFORMATION FOR SEQ ID NO:860:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

```

GAATTCGGCC TTCATGCCTA CGTTTCCCGA GAAACCAAGC CACAAAAAGT ACAGGGCCGC    60
CCTGAAGAAG GAGAAACGAA AGAAACGTCG GCAGGAACTT GCTCGACTGA GAGACTCAGG    120
ACTCTCACAG AAGGAGGAAG AGGAGGACAC TTTTATTGAA GAACAACAAC TAGAAGAAGA    180
GAAGCTATTG GAAAGAGAGA GGCAAGATT ACATGAGGAG TGGTTGCTAA GAGAGCAGAA    240
GGCACAAGAA GAATTCAGAA TAAAGAAGGA AAAGGAAGAG GCGGCTAAAA AAACGGCAAG    300
AAGAACAAGA GAGAAAGTTA AAGGAACAAT GGAAGAACA GCAGAGGAAA GAGAGAGAAG    360
AGGAGGAGCA GAAACGACAG GAGAAGAAAG AAAAAGAGGA AGCTTTGCAG AAGGGCTCGA    420
G                                421

```

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

GGATTCTTT	GGAATGGGCA	AAGAAGTGGG	GAATCTGCTA	CTGGAAAAC	CACAGCTTCT	60
GGAAACCAAA	AACGCCTTGA	ATGTGGTGAA	GAATGACCTG	ATTGCCAAGG	TCGACCAGCT	120
GTCCGGGGAG	CAGGAGGTGC	TGAGGGGCGA	GTTGGAGGCT	GCTAAGCAGG	CCAAAGTCAA	180
GCTGGAAAAC	CGTATCAAGG	AGCTGGAAGA	GGAAGTGAAG	AGAGTGAAGT	CCGAGGCCAT	240
CATCGCCCGC	CGTGAACCCA	AAGTTCTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 288 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

CGGGCTCTTT	GGGAGGTGGT	CAGGGGAAAA	GATGGTCAGT	GCTTTTCTG	GACAAATCCA	60
GGGGCCAATT	GAGGTGGGGA	GTCTATGAGA	AGGGCCCTGT	CAGCTGAGGC	GAGGGAAAGG	120
GCAGAGGACC	TAGAAATAAA	GGATATGGCC	TCTGTGTGCA	CTAGCAGGAT	GGGTAGGAAA	180
GGGAGATATG	AAAAGACGAA	ATGGGGACCG	GGTGGGTGG	CTCAGCCTG	CAATCCAGC	240
ACTCTGGGAG	GCCAAGGCAG	GCAGATCACC	CGAAGTCAGG	AGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 326 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

GCTCGAGTGG	AATGGGCCGA	GGAGATGGAT	TTGATTCTCG	TGGCAAACGT	GAATTTGATA	60
GGCATAGTGG	AAGTGATAGA	TCTTCTTTT	CACATTACAG	TGGCCTGAAG	CACGAGGACA	120
AACGTGGAGG	TAGCGGATCT	CACAACTGGG	GAAGTGTCAA	AGACGAATTA	ACAGAGTCCC	180
CCAAATACAT	TCAGAAACAA	ATATCTTATA	ATTACAGTGA	CTTGGATCAA	TCAAATGTGA	240
CTGAGGAAAC	ACCTGAAGGT	GAAGAACATC	ATCCAGTGGC	AGACACTGAA	AATAAGGAGA	300
ATGAAGTTGA	AGAGGCTCTT	CTCGAG				326

(2) INFORMATION FOR SEQ ID NO:864:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 546 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

```

GGAATGGGGA GAGGGATCTA CCAAGGTNAC AGCAGTTTTT TGAGCAGCTG GCACGTGCCT      60
CTGCTGCCAA CATGATGAGG TACAGAACCC AGCACAGGGA ATGCTCAGCC TGTGACTGTG      120
AGCTGGATGT GAGAGTCTCC TGAGGACCCCT CGGTATACTC AGAGCATTTC CTCTCAGGGT      180
GCAGGAAGAG GAAAGCAGAG GAAGTGGACT TGAAGGACCA AAGGTGGGAT CCTAGCTGGG      240
CCAATCACTG AGAAGCCATG TGGTCTTGGG CAAGTCATTG CCTTCTCTGA GCCTCAGTTT      300
CCCCATCTGT AAAATGGAGG TAATGATACT ATGCCTACCT CATCATCATG CTGTGAAGAT      360
TAAATGAGTT ATGCCATGGA AGTGTGTGAC ATTACCCATT GATAATGTCT CAGTGGCCTC      420
TCAATGAAAT GGAGTGTGAC AGAGTGCCAC ACTCTGAAAC GGCTCATCCC CGGTGATGGT      480
GCTGGGACTA GAACCCGGGC AACCTCGCAG TGCCATGCCC TACTGCATCA CTACGTCCAC      540
CTCGAG                                     546

```

(2) INFORMATION FOR SEQ ID NO:865:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 808 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

```

GAATTCGGCC AAAGAGGCCT AAGGATTCAT AGTATAAATC TTAAATTTAT CACAGTCTGT      60
ATTAAGTAAT ACTAAACCAC TTCGCATATA AATACATCAC AACAGTATAC TTCCGTTTAT      120
GCTATCTTGG TCTTTGTAAT TTTGTTTTTG TACATTTTAC TTTGGCATAA ATGTCAAAGT      180
ACAGTATTGT TATTTAGCTT TAAATATTCA TTTGCCTCTC TCCTTAATGT AAAAAGGCTT      240
CTTCTCAACT TCCTGACATT TCTTGCTAAA CTATACACGT CTGCCCTGTT TTCCAACAGC      300
ACACTGTTCT GTACTGTCCC TTATTTATTT TTTTTTTTTT TTTTTTTGG AGACGAGCTC      360
GTTCTTTGCC CAGGCCGGAC TGCAGTGGTG CTATTTCCGC TCACTGCAAA CTCTGCTTCC      420
CGGGTTCACG CCATTTTCCG GCTTCAGCTT CCCGAGTAGC TGGGACTACA GGGCCCCGCC      480
ACCACGCCCG GCTAATTTTT TGTATTTTGA GTAGAGATGG GGTTTCTCCG TGTAGCCAG      540
GATGTCCTTG ATCTCCTGAC CTCGTGATCC GCCACCTCG GCCTCCCAA GTGCTGGGAT      600
TACAGCGGTG AGCCACCGCA CCTGGCCTAT TCTGTCCCTT TTTAAAGCAG TTCTCTTTTA      660
AAAAATTGTG GTAAGATATA AATCACATAA AATTGTCAGT TATAACCATT TTAAAGTATA      720
TAATTCCATG GCATTAATTA CAGTCACAGT CTTTACAAAC TATTATTACT ATGTATTCTT      780
AAAGTTTTTT TACCCTCCCC CCCTCGAG                                     808

```

(2) INFORMATION FOR SEQ ID NO:866:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

```

GAATTCGGCC TTCATGGCCT AAAAGAAAAT GGCTTCAGTA AGTTAGGATG AAAATGAAA      60
ATATAAAATA AAGAAGAAAA TCTCGGGGAG TTTAAAAAAA ATGCCTCAAT TTGGCAATCT      120
ACCTCCTCTC CCCACCCCAA ACTAAAAAAA GAAAAAAGG TTTCTAATG AAAATCTTTA      180
AAAATACTGT CAGTATTTTA AAATTTTCAA CAGTATTATA AAAACATTGC ATCTCCCCAC      240
CTCTAATATG CATATATATT TTTCTGCTA AAATTGGTTT CTACAATTGA GTAAATGGCA      300
AATACATGAA GCAATGTCCC TAAATTTTAT AAAGAAATTA TATTTAATGC ACATTCTCGA      360
G                                     361

```

(2) INFORMATION FOR SEQ ID NO:867:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 880 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAAAA      60
CAGTCTTTTA ACCTTTCAAA ATGCCACAAAT GTGCATTTTA GATTGCCCTT AGTTTCCCAA      120
CTCTCAGTAT ATAGAGACTC AATTAGAAAA GAAATGGTGC TAGTAGCTTC AACCCACTGG      180
TATGTATTG AGGAACTGTT CCTGGTAGAA GGCAGTACCG TGTCCTTGG TATTGCTACT      240
GTGCCTGCTA TGTTACTTCT TTATGTATAT GATATGGAAG TAACTCCTTT TATACATGTG      300
GAGAAGTTTC ACAGCTTTT TTCATAGTCA TTGCATTAAA ATGTCTGCTG AGGCTGGGTG      360
TGTTGGCTTA CGCCGTAAT CCCAGCACTT TGGGAGGCCA AGGTGGGTGG ATCACCTGAG      420
GTTGGGAGTT CAAGACCAGC CTGACCAATA TGGTGAACT CCGTCTCTAC TAAAAATACA      480
AAAATTAGCT GGGTATGGTG GCGCACACCT GTAATTCCAG CTCCCGCCGG GCGACTCGAC      540
CAAAGAGGCC GGAATTTGGC CCTCGAAGCC AAGAATTCGG CACGAGGGGT ATTTTATT      600
TTANTTNTTC TGTTTCTCTC TNGAGTGTAT AGTGTAGAGG GGGTTTCTGT CTGAGTGT      660
GGCCTGGAGA TTTCCCTTAT ATGGTACAAA CCAGCAATGA ATTAAGAGGT CTCTTTTCTC      720
CAAGATCTAG TGTTTGTAC TAGGAGAACT CTAAAAAGTA TCTATTTAC TGTAGTGCCA      780
AAGTACAAAT TTATTTGGAT TTATTTTGT CCATCTTATT TTTTAATATA TTTCTTTTTC      840
TATGTTGTGC TTCTTCCA CCTCATCTCT CCTCCTCGAG      880

```

(2) INFORMATION FOR SEQ ID NO:868:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

```

GAATTCGGCC TTCATGGCCT AGTCATGGCT TTAGAATCTG GAGAAGAGTC TGACTCACTT      60
CTTTCCTGAG GGGATGCACT GGGTTTCA TCAAGTTCTT GAGAGGATCC CGAAGCACTT      120
CTCTGCCCCA GGGGAGTCCG AGCCACAGTT TTCTGATCAA CTGATGATTC TGACCCGCTT      180
CTTCTCTCT GGGGGGTAAG ACATTGTTG TTGAGCTCTG GGGATGATGG AGAAGCACTC      240
CTCGGCCTAG GAGTCTGAGG CAAAGCTTTC GGTTCGTTGGG AAGAATCACA TTCGTTTCTC      300
CCTCTAGATG GCGTTCTAGG TATATCTTTC ATTCCAGGAG AGGACCCAGA CAGGCTGTGC      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

```

GAATTCGGCC TTCATGCCTA GAGGATCTTC TCCTGACCCA GCATCGCTCA TCACAATGAA      60
GAACCAAGAC AAAAAGAACG GGGCTGCCAA ACAATCCAAT CCAAAAAGCA GCCCAGGACA      120
ACCGGAAGCA GGACCCGAGG GAGCCCAGGA GCGGCCAGC CAGGCGGCTC CTGCAGTAGA      180
AGCAGAAGGT CCCGGCAGCA GCCAGGCTCC TCGGAAGCCG GAGGGGGCTC AAGCCAGAAC      240
GGCTCAGTCT GGGGCCCTTC GTGATGTCTC TGAGGAGCTG AGCCGCCAAC TGAAGACAT      300
ACTGAGCACA TACTGTGTGG ACAATAACCA GGGGGGCCCC GCGGAGGATG GGGCACAGGG      360
TGAGCCGGCT GAACCCGAAG ATGCAGAGAA GTCCCGGACC TATGTGGCAA GGAATGGGGA      420
GCCTGAACCA ACTCCAGTAG TCAATGGAGA GAAGGAACCC TCCAAGGGGG ATCCAAACAC      480
AGAAGAGATC CGGCAGAGTG ACGAGGTCGG AGACCGAGAA GCCCTCGAG      529

```

(2) INFORMATION FOR SEQ ID NO:870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

```

GAATTCGGCC TTCATGGCCT AATTGAGCT TCAAGTCTCC ATGTGTATAA TGTGGGGTTG      60
ATGCTGTGGT GCTCCAAGGT GTTGGGGGGT TTTAGGCAGA GTTCTTATGC TTAATATAGG      120
ATGGAAGAGT GTTCGAGCTT CTTCCTTTT CTCTTTCTTC TCTTCATCTG ACATGAGCCT      180
GGGGTTCTAC CTCTCCAGA TAATTCATCC TGGAGCTACT AATTCATCTC CCCCATTTGAT      240
TTTAGTGTCC TGTCTGTTTC TAAATCTACT GGGCAGTTGG AGACATTGTC TTTTGTTCCT      300
TCATCTATCT TCTGTATCCA CAGTTGATAA TTGTCTATGT TTTTAGTGTG TTTTAAGGAA      360
ACTAGTCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

```

GAATTCGGCC TTCATGGCCT AGGTGGTGGG TGCTGTAGT CCCAGCTACT TGGGAGGCTG      60
AGGCAGAAGA ATTGCTTGAA CCCGGCAGGC AGAGGTGCA GTGAGCTGAG ATCGTGCCAC      120
TGCACTCCAG CCTGGGTGAC AAGAGTGAGA CTCTGTCTCA AAGAAAAGAA ACAAAAAATT      180
ATGTACACAA ATATGGACAG CACTGGCAAG AAGTGTGCA AAAACACATG TGGTTCTCTT      240
GTTTTGGGCT CAGACATGTG GCTGTGCCAT TACAGACCCC CGGGATTAG AATCCTCCTT      300
CTGAAAGGCG TCCTGTGCAC TCGTGAGCAC CAGCCTGAAC AGATGAAAAG GCTGAGCTGG      360
AGGGGCTGGG ACACAGCCCA CCTTGACGAC AGCTGCTCCT GGCTGTGCGG GGGGGTCTCC      420
AGGAAAGGCC ATTCTCCAC TAGGATCGCC AGGCCCTACT GAGGCTCAAG CTCCTTTGCT      480
GTTTGGAATC TTCCCTCCCC AGCCCCCAG CCTCATCAA GGCTGCCTTT TCCTGTTTAC      540
TGACCACAGC TGCTTTGACT CCATTAGCCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 528 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GAATTCGGCG	TTCATGGCCT	ACCAGACTAC	TACGGACTCA	TCTAACAAAA	CAGCACCGAC	60
TCCAGCATCC	AGTGTACCA	TCATGGCTAC	AGATACAGCC	CAGCAGAGCA	CAGTCCCCAC	120
TTCCAAGGCC	AACGAAATCT	TGGCCTCGGT	CAAGGCGACC	ACCCTTGGTG	TATCCAGTGA	180
CTCACCGGGG	ACTACAACCC	TGGCTCAGCA	AGTCGCAGGC	CCAGTCAACA	CTACCGTGGC	240
TAGAGGAGGC	GGCTCAGGCA	ACCCTACTAC	CACCATCGAG	AGCCCCAAGA	GCACAAAAAG	300
TGCACACACC	ACTACAGTTG	CAACCTCCAC	AGCCACAGCT	AAACCTAACA	CCACAAGCAG	360
CCAGAATGGA	GCAGAAGATA	CAACAAATTC	TGGGGGGAAA	AGCAGCCACA	GTGTGACCAC	420
AGACCTCACA	TCCACTAAGG	CAGAACATCT	GACGACCCCT	CACCCTACAA	GTCCACTTAG	480
CCCCCGACAA	CCCACTTCGA	CGCATCCTGT	GGCCACCCCC	AACTCGAG		528

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 611 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC	TTCATGGCCT	AAGCTGCACA	AAACGTAGAA	AGAAGACATA	GCGCCTGCCA	60
GGGGAATAGG	AAATGAGGGC	ACTTACACAT	TAATGTGAAT	TAGTAATTGT	GGTATAGAAA	120
TGTTTTATAG	TGAAAGATTG	AAATTGCTT	TTCAAGAAAA	ATGCCAAAAG	CTATTTAAAT	180
AATTCGAGGT	TACATCGTAG	GTTTTGATTT	TTCTCAATTT	AAGATACAGA	AATACAGCAA	240
GCCTTAATAT	AAAGTTTCCT	AAAGTTTCTT	CAAGTATTTT	TTAAGGTGGA	GAATGCAGG	300
AATTGTATAA	CCAGAATTGT	TTCTGCCTTT	AGCTTTTCAG	AACTTGAGAT	GTGGCAGCAC	360
TGGACTGGGT	TTTTTTAAAT	GTTAGGACTA	GGAATGTTTG	CTCTTGTTAA	TTATGAATTA	420
ATTGATTATT	AAGTTTAGAA	TGCATTTTAA	CAAGTATCTA	ACTATCAAAT	TGTGTTTAGT	480
AACTTGAGTG	TATGCACAAG	TTTGATCAAC	AGCAAAATAG	AGTTCTGAAT	TTCTTTTAAA	540
GTGATGATAT	ATTATTTTGT	GAAACTTTGT	GTTTGAAAAT	GTTTATTCTT	GTTTATGGTG	600
TAATACTCGA	G					611

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTCGGCC	TTCATGGCCT	ACGAGCGGTG	AAGGAGGAGA	CCAAGGAGGA	TGCTGAGGAG	60
AAGCAATAAA	TCGTCTTATT	TTATTTTCTT	TTCTCTCTCT	TCCTTTCCTT	TTTTTAAAAA	120
ATTTTACCCT	GCCCCTCTTT	TCGGTTTGT	TTTTATTCTT	TCATTTTAC	AAGGGACGTT	180
ATATAAGAA	CTGAACCAA	CATTGAGGTT	GTTTTTTTTT	TTGTTTCTAA	GTTTTTGCCC	240
TATTGAAGAT	GACTTCAGAA	AATCCATTCC	CCAGTCATGA	AAATGTACTG	TGCTATTCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:875:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 348 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

```
GAATTCGGCC TCATGGCCTA ACGGCAGCGG CAGCCTCTGA AAAGAATCGG GGGCCCAAGAA      60
AAGGCGGTCG TGTATCGCT CCCAGGAAGG CGCGCGTCGT GCAGCAGCAA AAGCTCAAGA      120
AGAACCTAGA AGTCGGAATC CGGAAGAAGA TCGAACATGA CGTGGTGATG AAAGCCAGCA      180
GCAGCCTGCC CAAGAAGCTG GCACTGCTGA AGGCCCCAGC CAAGAAGAAA GGGGCAGCTG      240
CGGCCACCTC CTCCAAGACA CCTTCCTGAG GACGCTGGCC CCAGTGCAGG CCAACATCCC      300
ACCCCCTACC TCCATATGGG ACCTTGAAG TCATCCCACT TCCTCGAG      348
```

(2) INFORMATION FOR SEQ ID NO:876:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 586 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

```
GAATTCGGCC AAAGAGGCCG GAATTGGGCC CTCGAAGCCA AGAATTCGGC ACGAGGAGAC      60
TATTTTCCAT TTCACACAAG AAATCTTTGA TTATTCAGTA AAAAGAGGAA ATATAAGAAA      120
AAAAATCAGA CTAGTCTGGC CAACATGGTC TAAAAATACA AAATTAGCCA GGCATGGTGG      180
CGGGCGCCTG TAATCCCAGC TACTTGGGAG GCCCAAGCAG GAGAATCGCT TGGACTCGGG      240
AGGCGGAGGT TGCAGTGAGC CGAGATCATG CCACTGCACT CCAGCCTGGC AGACAGAGCA      300
AGACTCCCTC TCCAAAAAAG TTAAAAAATA AAAAGAAAAA AAAGGCCGGG TGCAGTGGTT      360
CGGCCTCCCA AAGTGCGGGG ATTACAGGCG TGAGCCACCA TGCCCGGCCA CTTTCTGTAT      420
TTTTTAATAA ATAAGAAATA CACATTTAGT AGTAGTTACA AAGATCTGTA GGCCGTAGCA      480
AATATTCAGT AACTGGAAGA TGCCAATGAA CATTGTTGGG TAGTATTTAA ATAACAAAA      540
GTTCAAATAT TTGACAAGAT TAACAACACT ACACGGCCTT CTCGAG      586
```

(2) INFORMATION FOR SEQ ID NO:877:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 445 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

```
GAATTCGGCC AAAGAGGCCG GAATTGGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGTAA      60
TTTTAAAAAT TTATGTATTT TCTAGCATTT GCCTCAAGGA TTGAAATTTT TTTTITTA      120
TGTGTTTACA GGTAGAATTC TTTATTTAAA AAGTCAGTTG AATATCAAAA CTATTGATA      180
TTCTTCAGAC TGAATATTA TTCTCTAGTG TAGAAGAAAA CATTTTCTGC TTACAAAACA      240
AATAGTAAAT ACTCTAAAT AGGGGTTGGC AAACCTTTCT TAAATAAAAG GCCAGATGGT      300
AACTATTTTA GGTGTTGTGG GCCATGTGTT GATAACTATT TTAGGTTTTG TGGGCTACGT      360
ATGGGGTCAC TCTCCATTCT TCTCTCTCTC TCTCTCTCTC TCTCTCTCTC TCTCTCTTTC      420
```

TGTGTGTGTG AGCGGCGCTC TCGAG

445

(2) INFORMATION FOR SEQ ID NO:878:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 586 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

GAATTCGGCC	AAAGAGCCGG	AATTGGCCCC	TCGAAGCCAA	GAATTCGGCA	CGAGGGGGTC	60
TCCATTCCCC	GAGAAGCCAG	GGGCAGGGTG	GGATGGGGAA	GACCAGGAGC	AGAGTCGAGC	120
CTCACAGAAG	CCAGCGCGGG	TCTCTGCTCA	GCACCCAGC	CGGGGCTCTG	GACCCAGGGT	180
AACAGCCCCA	GTTCATCCCA	ACCCCTCTCA	GAGCCTCAAG	AGGGGTAGCT	CGGCTGCCGG	240
AAGAGAGGGG	TGCCCTATCC	CTGGCAACCC	CTCCACGTAG	CGTACCCAG	CACCTGCCAC	300
CGCCTTTGCC	ATTTCTTTGA	GCTTGAAGTT	AACTCTCTTA	GAGTCTAACT	TTGGTTCATT	360
TCTGCACAGG	TACAATAGAT	GACTTTATTT	GTTTAAATG	TTTAATATAT	ATACATACAT	420
ATATATATAT	TTGTCTGTAA	GAATTATGTT	TAAACAGCT	GCTGTAGAGT	ACCTTTTTTT	480
AAGTAAATCT	TACAGTGGAG	TATATTTTTT	AAAGCACAAA	ATTGGTGCCA	AGACTGGGTG	540
AGAAATGTAC	ATTACCCCT	TATATTTTG	CGTCGGATTC	CTCGAG		586

(2) INFORMATION FOR SEQ ID NO:879:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

GAATTCGGCC	AAAGAGCCGG	AATTGGCCCC	TCGAAGCCAA	GAATTCGGCA	CGAGGGGAAA	60
ATCTTGTCCT	AAAAATATAT	GAGTTTGGGG	GTAAGGGGTG	GGATAGCCAA	GCAAAATCAG	120
TAATTATTTT	AAAATGAACA	TATGAATTTT	TATTAACCTT	TAGTTAAATA	CAGATTTTAC	180
AACGAGGTCA	GCATAAGCCT	AAATCTATAT	AGAGGGCTAA	CTCAGGCATT	GTCTTGTTTA	240
TTTGTAGACT	GGATTAAAAA	CAACCTGTCC	TGTTTTGTCA	GTTCCAGCT	TCTTCGTTTA	300
GAATAAATTA	GACCAAAAGA	AGAAACGTGC	TTGTCTCTGT	ATACCCGCAG	AATGAAGTTA	360
CTGTTGTTAA	AACCGGATTT	TTTCATTTTA	CTAGGTTCCG	CTCTCTCCCT	CGAG	414

(2) INFORMATION FOR SEQ ID NO:880:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

GAATTCGGCC	AAAGAGCCCG	GAATTGGGCC	TCGAAGCCAA	GAATTCGGCA	CGAGGGTAAT	60
TTTAAAAATT	TATGTATTTT	CTAGCATTTG	CCTCAAGGAT	TGAAATTTTT	TTTTTTACTT	120

```

GTGTTTACAG GTAGAATTCT TTATTTAAAA AGTCAGTTGA ATATCAAAAC TATTGATAT      180
TCTTCAGACT GGAATATTAT TCTCTAGTGT AGAAGAAAAC ATTTTCTGCT TACAAAACAA      240
ATAGTAAATA CTCTAAAATA GGGGTGGCA AACTTTTCTT AAATAAAAGG CCAGATGGTA      300
ACTATTTTAG GTTTGTGGG CCATGTGTTG ATAAC TATT TAGGTTTTGT GGGCTACGTA      360
TGGTGTCATT CTCCTATTCT CTCTATCA CCTACCCTCG AG                          402

```

(2) INFORMATION FOR SEQ ID NO:881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

```

GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGGCC      60
GTTTTTTTTT TTTTTTTTTT TTTTTCNNG NNAGGCTTTC CCTAGGTGAT TTTAATTGC      120
TATTATAAAT AAATATCCAT TTTCCCAT AATATTGCT ATATGTTAGT ATATTAATCT      180
TGACTGTTA CCTTTTCAA CTCTATTGGT TCTGATAGCT TGTCAGTTGT CTACCTTTCA      240
TCTTCTAGGT AAATATTTCT TACAAATAAT GAGATTTGCT CCTACTTTCC AATTATCTC      300
ATTACTTTTA CTNNTCTTAC TGCACTGGCT AGGACACCAC TACCTTCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

```

TTTTTTTTTT TTTTAACTT AAAAATAGTT GTATTATAT TCCACAATTT GTTCAAATAC      60
TGGTTTTCTT ATAAACTTTC TACAGGATGT TTTTAAACAA ATTCTTCACA TTGTGTTTTG      120
ACTATGTACT TCGGAATTT CAGGGAAATA GTTCTGTGTA TTTTAAATAG CTTAATTTGT      180
ACTAAAGGGA TGGTAGGTGG TCACATGCAG TCCATGTGGG ATTCTAACAT GACATTTAGT      240
GAGTTTTCTG ATGTGGACCA TCCCTTTGAT GCTGAAGGTA ATGCATCTGT TGAAGAAGT      300
GACTGTAGAT TTGGATTACT GCTCTCTGCA TCTCCCTCTT TTCTGCTCGA G              351

```

(2) INFORMATION FOR SEQ ID NO:883:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

```

GAATTCGGCC TTCATGGCAA GAAGGAGNCT TAGCATCAAA CTTTGGAAGG GGAAGCCAGA      60
GAAAAAGGTA GAATGGACAA GTGACACTGT GGACAATGAA CACATGGGCC GCCGTTTCATC      120
CAAATGCTGC TGTATTATG AGAAACTCG GGCCTTTGGC GAGAGCTCCA CGGAAAGTGA      180

```

```

TGAGGAGGAA GAAGAGGGCT GTGGCATACA CACTGTGTAC GTGGCCACCG CAAAGGACGG      240
GTTNTGCAAC CCTAGGACCG ACCCCCACCA CCCTTCCCCA GCTCCTGACC NTTCCTCAGCC      300
CCCTCCAGGG CCAATGCAGC ACTAAATCCC TCTCTCCTCC AGCATTCTCTG TGTCTGTCTG      360
GCCCTAAATG TATCCATGTG GCTACTTCTC CAGCCCCCTC CTTCCTNTC TTCTGCCTGA      420
TAGAGGGAAG AGGAAGAGGA GGACGAACAG AGATCCTGAA ATTCTGACTT GCTGCTATTG      480
CAGAACCCAG CCTCCTGGGT TTCCCCAGTC CTCATTTTTC CTCCAATAC CCACCTTCT      540
CTCTCGAG                                         548

```

(2) INFORMATION FOR SEQ ID NO:884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

```

GAATTCGGCC TTCATGGCCT AAAAAATACA AAAAATTAGC CGGGCGTGTT GGCGGGCGCC      60
TGTAAGTCCCA GCTACTTGGG AGGCTGAGGC AGGAGAATGG CATGAACCTG GGAGGCGGAG      120
CTTGCACTGA GCCGAGATCG CGCCACTGCA CTCCAACCTG GGAGACACAG CGAGACTCCG      180
TCTCCNAAAA AAAAAAAAAA AAAAAACAC ACTTGCTTA CAAAGACTAA CAAAAGATAC      240
AAAATAAAAT AACTTTACAG CATCATAGA AAGCGAACAA AATCCTAAGA TAGATACATT      300
TATCTTTCTT GTTTTAGAAC TTTTCTGTG TAATGGAATG GAAATGCTTA ATCTTGTTC      360
AATGTTTTCA GTGTTGTGC TTTGTCAAT TGAGGTTGGA TGTAAAGCC CTTACTACTG      420
TATTATACAA AGCAGCGAAC CTCGAG                                         446

```

(2) INFORMATION FOR SEQ ID NO:885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

```

GAATTCGGCC TTCATGGCCT AGCCGGCGCC GCCGNGTCTT CCCGGTCTCC TTTCCCGGCC      60
GCACAGGGTT TTATAGGATC ACATTGACAA AAGTACCATG GAGTTTTATG AGTCAGCATA      120
TTTTATTGTT CTTATTCCTT CAATAGTTAT TACAGTAATT TTCCTCTTCT TCTGGCTTTT      180
CATGAAAGAA ACATTATATG ATGAAGTTCT TGCAAAACAG AAAAGAGAAC AAAAGCTTAT      240
TCCTACCAAA ACAGATAAAA AGAAAGCAGA AAAGAAAAAG AATAAAAAGA AAGAAATCCA      300
GAATGGAAAC CTCCATGAAT CCGACTCTGA GAGTGACCT CGAG                                         344

```

(2) INFORMATION FOR SEQ ID NO:886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:


```

GAATTCGGCC TTCATGGCCT AAAAATCTAA ATTAACGTAT GAATAATTAA AAACAGAATT      60
TCAACATTGA GACAATGTAG AGATATATTA TGGTATAAAA TGAAGCATTT GCACGAACCT      120
TTTAGCTAAA ATTTGTTTCA AAGAAGTTGC TTTTGTTTTT AGTGACCTT GAGTTCAACA      180
CAGATGTGAA TGCCCGCTTT TTCCAGAAGG GTTCTTGGGA GAAAACACTG GAGAAGTTCT      240
AAGCACTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTAGA GATGGTTTCT TAÇTCTGTTG      300
TTCAGGCTGG AGTGCACTGT TGCAATCATA GCTCACTGCA GCCTTGACCT CCTGGCCTCA      360
AGTGATACCC CTGTCTCAGC CTCTCGAG      388

```

(2) INFORMATION FOR SEQ ID NO:887:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

```

GCCCCAGTCT AAGGCATTTA AAATTAACA GCTCTTCAAC GCCCCAAGTT ATTTTCATCAG      60
GCTAAGAACT TCTCCGAGAA ACGCACAAGA AGGCAGGCAA ACAGGTGGGT AGGTGAGAGG      120
TCACGGGGCT CCATCTGCAA GCTCCATCTA CAAGGCATCA ATCTGCGTTG TGGCATCAAC      180
GTTAAATGT TCTACAGCTT AGGGATCTTC TTGAAGCAAG GTTCCAAGCA CAAAAGTAGT      240
ATGACCGGAG GCTCAATTTA GAAGATGCAG CATCTGAAAA CCTTTACCCC AGGAAAGGAG      300
GGGTGCCTGC TGGCATTTCAT GGGCTCTGGA ACAAGCATT ATTCAAAGCT GATGGCCCT      360
CGAG      364

```

(2) INFORMATION FOR SEQ ID NO:888:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

```

GCACCCCAAA ATGCCAGCCT CTCCTTTCTT CCCATCCACC AGTATACTGC GGGGCCATT      60
CTGGTCTTTG TCCAACAGGA AACCCATTTC TGGTGGGATA TGCCTTCCAG TGCCACAGGG      120
CCACTCACCC CATGCATCTC TGTCTGCCC GTCAGTGCTG GGACGGACAG CAAGGGCAAG      180
CCCAGTGTCT GCGGATAGG TGGGTGGGAA CAGAGAGGGG AGAATGCCGT CCTAAGCTTC      240
TGCTTGGGGA TCCCCACAC GACCTGGGTA CTGCCTGGGA AACCTGTCCT AAGTAAACT      300
ATGGACCTCG CCTCGCCAC CGGCCTGCGA AGCCAGCATC TCCGTGAAGG TGGATGGAAG      360
CGCCTTTGTC CTCATTTTGA GCTGCAAGCT GGGTCAGCGG CTCTGAAGCC CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:889:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

```

GTAGGCCATG AAGGCCGAAT GGAAAAAGTC AGTTAAAGAG GACTCAGTCC CCACAGGTGC      60
GGAGGAGAAT GTGGTGTGTG AGTCACCACT AGAGATTATA AAGTCCAAGG AAGTAGAATC      120
AGCCTTACAA ACAGTGGACC TCAACGAAGG AGATGCTGCA CCTGAACCCA CAGAAGCGAA      180
ACTCAAAAGA GAAGAAAGCA AACCAAGAAC CTCTCTGATG GCGTTTCTCA GACAAATGAC      240
ATCAGACTCC ACAGAAAAGA CTATCACACC GCCAGAGCCT GAACCAACAG GAGCACCACA      300
GAAGGGTAAA GAGGGCTCCT CGAAGGACAA GAAGTCAGCA GCTCTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:890:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 719 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

```

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGGATGCT CTGGGTTTGC TGTAAGTCGT      60
TGTTACTGGT CNTGTTAGGA GGAGGGCCAG GGGGACCCCC ACCTGGGGCA GTCCCTTCTG      120
TCCCTTCAGC AGGTGGCTGA GCTGGAGCAG ACATTTTCTT GACAGAGAGA GTGAGGGTCT      180
GTTCTCTTCC GGAGGCTGCG GCGAGACACC CGGCGAGGGA CGCTGCGGCT GAAGTGGACG      240
GAACTGCCAA GCTCCGCCTC GCGCCGACTA CCCCCTGGTC TAGCTGCGCT GGGGTTTCTC      300
CATGTTGGCC AGGATGGTCT CGATCTCTTG ACCTTGTGAT CTGCTGCTCT CGGCTCCCA      360
AAGTGCTGGA ATTACAGGTA TGAGCCACTG TGCCTGACAC CTGTCAAATT ATTTTACTGT      420
GTTTATTAC CATGTTTCTT TCACTGTGGG GTCTCTGTCC TTGCTGTTT GTTTTCTTT      480
TAACTTCTTT TGTTATTTAG GAAGGTTTAT ATTAATATTT TAATTTCTCA TTGGATAATT      540
CCTATATCAA AACTATTGTT GACAATCAGT TACAGATGGA ACTTCGTCTA CTCCTTCTCC      600
CCTTCTCACT CTTGCTCTTT CTCCTTTTCT CACTCCAGCA GTTGACTAGT CTCATTGAAA      660
AAACAAATTG GGGCCGGCCA GGCATGATGG CTCATGCCTG TAATCCCGA CAACTCGAG      719

```

(2) INFORMATION FOR SEQ ID NO:891:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

```

GAATTCGGCC TTCATGGCCT AGATACTCCG CTGAAGATCT GATGTCACCC CAAATGCATG      60
GCTCCAGCCT CAGTTCAGCT TTCCACACTG CTTGCAGAAA TTCCTTCATT TATCTTGAGT      120
TTCTCCTCTC ACTCCCATGG TAGCTTTTCC ATTCCCACTG CCTCTTCTCA CATTTTCAGTA      180
GATGAGAATA GAAGCCATAG GAAGCAAACCT TCCTCAACCT CCAGCCAACC GCCGAGCGAT      240
GGGCATCTCT CGGGACAACCT GGCACAAGCG CCGCAAAACC GGGGGCAAGA GAAAGCCCTA      300
CCACAAGAAG CGGAAGTATG AGTTGGGGCG CCCAGCTGCC AACACCAAGA TTGGCCCCCG      360
CCGCATCCAC ACAGTCCGTG TCGGGGAGG TAACAAGAAA TACCGTGCCC TGAGGTTGGA      420
CGTGGGGAAT TTCTCTGGG GCTCAGACTC GAG      453

```

(2) INFORMATION FOR SEQ ID NO:892:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

```

GAATTCGGCC TTCATGGCCT ACCAGCCTCT GGGCTGAGGC AAAGACCTCT GAGGCCCCGT      60
CCACCCAGGA CCCCTCCACC CAGGCCTCCA CTGCGTCCTC CCCAGCCCCA GAGGAGAATG      120
CTCCGTCTGA AGGCCAGCGT GTGTGGGGTC AGGGACAGAG CCCCAGGCCA GAGAACTCTC      180
TGGAGCGGGA GGAGATGGGT CCCGTGCCAG CGCACACGGA TGCCTTCCAG GACTGGGGGC      240
CTGGCAGCAT GGGCCACGTC TCTGTGGTCC CTGTCTCCTC AGAAGGGACC CCCAGCAGGG      300
AGCCAGTGGC TTCAGGCAGC TGGACCCCTA AGGCTGAGGA ACCCCTCGAG      350

```

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

```

AACAGGAGAT GGACAAGCTG AAGGAGCAAT ATGATGCTGA GTTGCAAGCC CTGAGGGAGA      60
GTGTGGAAGA AGCAACCAAG AATGTCGAGG TCTTGGCGAG CAGGAGCAAC ACTTCAGAGC      120
AAGACCAGGC GGGGACTGAA ATGCGCGTGA AGCTTCTGCA GGAGGAGAAT GAGAAGCTGC      180
AGGGAAGAAG CGAAGAGCTG GAGCGGAGAG TTGCTCAGCT TCAAAGGCAG ATCGAGGACC      240
TGAAAGGCGA TGAAGCCAAG GCGAAGGAAA CGCTGAAGAA GTACGAGGGA GAAATACGAC      300
AGTTAGAGGA GGCCCTTGTG CACGCCAGAA AGGAAGAAAA AGAAGCTGTG TCAGCCAGAA      360
GGGCCCTGGA GAATGAACTG GAGGCTGCTC AGGGAAATCT GAGTCAGACT ACCCAGGAGC      420
AGAAGCAGTT GTCTGAGAAG CTCAAAGAGG AGAGTGAGGC GCTCGAG      467

```

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

```

GAATTCGGGC TTCATGGCCT ACTCAGCTTT CCTGGTCTCC CATCTGAACT GCTTCTTTGT      60
GCACCTCTTG TTCTTTCTCT TGGCTCCCAG TCTTGATTCC TGTGATCACT CTTCATCAC      120
TAATTGCACA AGTGATTTC GGTGCAATTC TGATTAGCCT GCGTCCACAC AGTGATCGAT      180
GATCCTATGT GCCTAGAAAG GACACTGTGT GCTGCTCATG ACCTGCAACA GGAAGGAGC      240
CATTCTTGT TAGCAGTGTA AGAACCTTAG AGCAAAGGAG TTGACCTTCT GATTGAATAT      300
AAGCACAACC TCGAG      315

```

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```

GGGCTTAGTT AGGAGCTATG GCTAAACATC ATCCTGATTT GATCTTTTGC CGCAAGCAGG      60
CTGGTGTGTC CATCGGAAGA CTGTGTGAAA AATGTGATGG CAAGTGTGTG ATTTGTGACT      120
CCTATGTGCG TCCCTGCACT CTGGTGCGCA TATGTGATGA GTGTAACATG GGATCTTACC      180
AGGGGCGCTG TGTGATCTGT GGAGGACCTG GGGTCTCTGA TGCCTATTAT TGTAAGGAGT      240
GCACCATCCA GGAGAAGGAC AGAGATGGCT GCCCAAAGAT TGTCAATCTG GAGGAACCTG      300
AG                                                                 302

```

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```

GAATTCGGCC TTCATGGNCT ANTCTCATT NAAATATATC CTTACTGAAA CATCTGGAAT      60
AACGTCGTGAC CAAATATCTG GGTACAGTGA TCCAGCCAAG TTGAGACATG AAATTAATCA      120
CCATGGCCTA CATTTTATC TGTTTGGCTG CAATTCTGTC AAAGGCTTCT GCTCTTCATA      180
ACATTTCACT CACTAGCTCC ATGAAGCCAT ATGATACAAA CCTTGCCCTG GTAGCCTTCA      240
CTTTTTCCTA AAAGAAGTCT ATTAAATGCC AATCAAGTAT CTTCTCCTCC AAGCTCAGTA      300
GCTCGGGCCT TCAACAGCTG TTCCCCATTC CGATCCATCT CCCTGAGCTA CCCTGGCATT      360
CTTATCAGGA CACTGGAGGA ATCTATGTAT GTGCCTCTAA AGATTGAGCA CCCAAACATG      420
ATAGAAATCA CTGTGTTTAC ACTGTATCTC TATATCTGCC CATCCCGCTC GAG                                                                 473

```

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 594 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```

GCTCGAGTGA AGTGGTATCT CATGTGGTT TGGGTTTTAA TTTTATAATA TTTTAATTTT      60
TAAATCAAAA AGAATATACT GGGGCTGGGG TGGTGGCTCA AGCCTGTAAT CCCAGCACCC      120
TGGGGGGCCA AAGGGGGTGG ACCACCTGAG TTTATGAGTT CAAGACCAGC CTGGCCAACA      180
CGGTGAAACC CCATCTCCAC TAAACATACA AAACCTCAGC GGGTATGGTG GCAGGCACCC      240
GTAATCCCAG CCTCTCAGGA GGCTGAAACA GGAGAATCAC CTGATCCGGG AGGTGGAGGC      300
TGCCATGAGT CAGAATCACG TCACTGCACT CCAGCCTGAG AGGAGACCCG TACAAAAAAA      360
AAAAAAAAAA ATATATATAT ATACACACAC ACACACACAC ACAAGGATTT TAGATTTGAA      420
AATGATGTTT TTTACTCATT TCAAAATGTA CTGTAACCTT TCTTTGGTTC TTACTGTTTT      480
CATTTAATT TCTCTGTTTT CAAGAAAAAT TGTCTTTATT GACATTTGTA AAAAAGAATG      540
TGTTTGCCC AGTTATTAAG TATTTTATTT TTATGCAATT TCAGAACACT CGAG                                                                 594

```

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

GAATTCGGCC TTCATGGCCT ACTGTACATT TTTTAAAG TTTGTTGAAA AGAATATTGT	60
CTTATTCTAT AAAACATTTC AAACCTAGTT AGAGATTTGT AATCAAAAAA CATTTGCGCA	120
GAAAGCAGCA CTTAGGGCTG CCTGTTCTAT ACCCTACAGT CAGACAGGAA AAGAACTGAA	180
AATGGCACCC TTCTGACATT CTGAGGCAGC TGGACTGGCA GCCAAGTAAA GGAGAGTGAT	240
GAGGTGGTGT GGGGAGGGTG GGGAGGCAGC GCGAGGGTGC TCTCCACAGG GTAGGTCTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 475 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

GCGGCCTTCA TGGCCTAGTG CTGTGTCAGTT TGGAAAGTCA CAGGGAGTTT ACCATTCTAT	60
AATTAGAGTA GGAGGAAAAT GAGAACCCAC TGGTAGAAGA AGAAGCAACA GTCTTCTAGG	120
GTCTGGCATT TGATGAGATA GGTATTCAGT TACTGTGCAT TTCCATTGTT TTTCCATGGC	180
AGAACATACG GCAGAGATTG GGGAAGTCG ATGCCTGAAG CCAGGTTATT CTTATGTTCT	240
GTAAGTATGT TGCTCGCAGG GCTGTGTTTG TCAGAGTAGT GAGTTGTGCC CCAGACAAAT	300
GGGGTGCTGG TCTGCTCCCA CAAATCTTTA TCCCAGTCTT CATCGCAAGG AGGGCACTGC	360
CAAGTGCTCT CAGCCAGAGT CTCTGTCTA AGGCTCCTGG TTTGGTTGAC AACATCTTGC	420
TCAATACAAC TTCTGTCATC ACAGCTTGAG ATATGATGAC TAATTCAGC TCGAG	475

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 507 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

GAATTCGGCC TTCATGGCCT ACAGCTGCCT TTTCTTTAA AGGGGTTCTT GTCTTCTGGA	60
ATTCCCTTTA CTAGAGGATC CTCTCCAGAA CGTCTTCAA TATAGTTCTT TATTCTTCA	120
GAACATTTAG ACACCTGTTG TCTCTGCAAC TTCATTCTT TGCGAAGCTG CTCAACTTCC	180
ATTTTCAGTT TTTCTTCTC TGGCAAATCT TCGATGTGAA GGGCAGGCAT TTTGCCCCA	240
GAACCGGGCT CAGGCTAGCT CTGGCAGCGG AGCCGCTGGA AGAGCGGCGA AGCTCGCGC	300
GTCCCGAAAC AACTGAAGGC CTGGCCCCGC GCCCACCCTG GCAGGATGTG ACTGCAGCCC	360
TGCTGCGGTC CCCAGCTCCC CGAGGGCTTG GCTTTCTCCG GGACGCTTGT CACGCCAGCG	420
TGCCCCAGCT TCCTAGGACC TGAGAACTCT GCCTTTTCTC AAGTCCCTGC AACCCAGGAG	480
GCCTGCCCGG GTGCTAGTAG GCCATGA	507

(2) INFORMATION FOR SEQ ID NO:901:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 495 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

GAATTCGGCC	TTCATGGCCT	AGTTTGGATT	TTCATATTAG	GGATACTCAA	CTGGTATTAT	60
TATTCTGGCC	CCTGCAAATT	TTTCAGTAGG	TCCCCTAGTA	TGTCATGCCA	GGGACTATGN	120
GAGTTCCTGG	GAATAGCACT	GTAANACATT	CTTGAGTGGG	TCCTTGACTC	CATTGAGTTT	180
ATAATCTCGT	AGGAGGAAGG	CTATGAAGAA	TTCTAATAAA	GCAAAGCAAG	CAATCACACAC	240
AAACCTTCCT	CTTTAACTTA	TCAAAAATGG	AAACTTTGAA	GAGCTGCTCT	TTAATAAATC	300
ATTGGAAAGC	ACCAGGACCC	AGGTGTTTGG	ACTCAGCCTC	ATTTCAGACT	GAGATCTGAG	360
GCCATGATAA	CTCATGTGCC	TATATATGCT	GATAATCACC	ATTACCTATA	CCATTCTTTA	420
CATTCTCTCA	TCTACACAAT	CATCTTCAAC	TCTCTCTCAT	CCACTTCAGC	GATTGAATTC	480
TTTACCGGCC	TCGAG					495

(2) INFORMATION FOR SEQ ID NO:902:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

GAATTCGGCC	AAAGAGGCCT	AGAATTCCAG	ACCTAGCTCA	ACCCATGCCT	CCTTTCCTTC	60
CTTCCCTCCT	TCCTTTCTTT	CTTTTTCCTT	TTCTCCTTCC	CTCCCTTCTC	CCTTTCCTTC	120
TTCTCTCCCT	CTTTCTCTTT	CTCCCTTCTT	CCTGCTCTTC	CTTCTTCTCT	CCCTCCCTCC	180
CCTCCCTTCT	TTCTTTCTCT	CCCTCCCTTC	CATTCTTTCC	TCCCCCACCC	CCCGTTTCTT	240
CTCTTTGGAG	AGATGTACAG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:903:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

GAATTCGGCC	AAAGAGGCCT	AAATGAGAGC	TGAGTGAAGT	GGATGCCCT	TATAAAAACA	60
TCAGATCTCG	TGAGAACTTA	CTATCACTAG	AATAGCATGG	GGGAACCACC	CCATGATTCA	120
GTTACCTGCC	CCCAGGTCTC	TGCCACCACA	CATGGGGATT	ATGGGAACCTA	CAACTCAAGA	180
TGAGATTTGG	GTGGGGACAC	AGGCAAATTA	TATCAGCTGT	TGTGCTCATT	AGTTTGTATA	240
TCATCCTTGG	CTCCTTTAGC	ACTATAAGGG	CAGGATTGAG	TCCTTGCAAC	AGAAACCATT	300
CAGCCTGCAA	AGCTGAACCT	ATTTACTTTC	TGACCCCTTA	TGAAAAAGTT	TACTGATCTC	360
TGACTAGAC	AGTTTTTTAA	AAATGACATC	TTATGACCGG	GATTCTCGAG		410

(2) INFORMATION FOR SEQ ID NO:904:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

```

GAATTCGGCC AAAGAGGCCT AGCCGAGACT CTGTCTCAAA AAAAAGAAAA AAAGCTGCTT    60
TGGGTCTTAT GAGGGAGGGG ACTGGGAATC TAGGTGTTTC AAGCGCCCCA GGCGATTCTT    120
AAGGTCACAC AAGCTTGGGA GACACTTCAT TAAGCAAAAT CTTTGGCCG TTTGTCTCTG    180
GTTGAGCCTC AGTGTCTATT CATTGAGTGG TCACCAAGAG TTTGGGCTGG ACTGATCATC    240
AGCATTTACA GGTTTGGAAA TTGAATTTAG TTTTACTACT CAGAGCTTAT TAGACTTGAG    300
CAGATTTAAA CGGAAGGACA CTCGAG                                         326

```

(2) INFORMATION FOR SEQ ID NO:905:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

```

GAATTCGGCC AAAGAGGCCT AGGAACTGTT TTGACCCTGA AGGCTATTTA ATCCACTGTC    60
CCCTACAAGG CCTCACAACT GCTGGGGGAA AAAAAACAGC AATGAGGATG ATCTGAGTT    120
AATGTGTATG CTCGCAAGA GAGCTTGCTT ATACCTTGAT TATTTCTATA AATCACATGT    180
TAATACATTG CTTTCAGAAT GAAATACTGA CTTGATCTGA TAGGAGAAAA TGGTAATATT    240
TCATAGTTGT TTTCCAAAGA CAAATTTAAA TGTGTCTGT TATCTCCTTA CTTAGTTTAA    300
GAATTTAGTT TTGAACCCCA TTGACTTTGT CATTGCAAT TTTAAAAATA TTTGGGACTG    360
GGCATGGTCG CTCACGCTG TAATCCCAGC ACTTTGGGAG GCATCTCGAG                                         410

```

(2) INFORMATION FOR SEQ ID NO:906:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

```

GAATTCGGCC AAAGAGGCCT ACGCTTCCCG GGTCAAGCG ATTCTCCTGC CTCAGCCTTT    60
TGAGTGGCTG GGACTACAGG TGGATGCCTC CATGCCTGGC TAATTTTGTG TATTTTAGTG    120
GAGACAGGGT TTCACCGTGT TGCCCGGGCT GGTCTTGAAC TCGTGAGCTC GGGCAATCCA    180
CACTCCTTGG CCTCCCAAAG TGCTAGGATT ACAGGTGTGA GCCACTGCAC CCGGTCGAGG    240
TACAGTTTTG AAGTTCATGC AAATCTCATC ATTTGCTCTT CTGCAACAAA ACATTTTCTT    300
TCAACTTATT TTGCCTGTGT GAAGCTCAGT GCTTTAACTC ATATATGGAG TTATCTTCTT    360
CCCTCAGACT GGAGACGTTG GTGAAATTGG GGCTAGACTG AAGATGCTA AGGTGGCTTG    420
ATTGACAAAG GTCTCTCCTC ATCCCCAAA TAAATAACAT TTTTTCATT ATAATAGTAA    480
TACACGAGTC GACTCGAG                                         498

```

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

```

GAATTCGGCC AAAGAGGCCT AAAGTGGTGC TGGTTTCACA TCACGACAGC AACGGGATTC      60
TTTTGCTTTG AAAATGTTGC AGTCCACCTG TCCAACCTGA TCTTCCGGAC ATTTGACTTG      120
TTTCTGGTTA TCCACCATCT CTTTGCCTTT CTTGGGTTTC TTGGCTGCTT GGTCAATCTC      180
CAAGCTGGCC ACTATCTAGC TATGACCACG TTGCTCCTGG AGATGAGCAC GCCCTTTACC      240
TGCGTTTCTT GGATGCTCTT AAAGCGGGC TGGTCCGAGT CTCTGTTTTG GAAGCTCAAC      300
CAGTGGCTGA TGATTCACAT GTTTCACCTG CGCATGGTTC TAACCTACCA CATGTGGTGG      360
GTGTGTTTCT GGCAGTGGGA CGCCTGGTC AGCAGCCTGT ATCTGCCTCA TTTGACACTG      420
TTCCTTGTCT GACTGGCTCT GCTTACGCTA ATCATTAAAT CATATTGGAC CCAGACTCGA      480
G                                     481

```

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 764 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

```

GAATTCGGCC AAAGAGGCCT AGAAACAATG GTTTTCAGAC ACTGAAAGTT CATAGTACAG      60
GACTGTGATC TCTGCGAGAA GGGGGAATAA TGAGGTGAGT CCAGTGATTG CTCAGGCGAA      120
TGGCCTGGAG GCAGTTTCTA GGCAGCAAAG CAGGGAGAGG GAAGCCAGAG ACCAGTGGTC      180
CTGCTGTGTT GAGGAGATGG AGATCAGTGT CACCGGAGGC CAAGGTGAGT AAGTGAGAGG      240
AGAGGAGGCA GCAGCACACA GACAGAGAGT GCTGTAGATC TGCAGTGGGT CCCCTGGAGT      300
CCTTGGTTGA GTGAAGGTGT TAGAAGAAAC TACTTAAGCC AAGAAATGAG TAACTGGAAA      360
TTAGTAGAGC AAATAATTTA CAGATCATCT ATGGGGCTGG GAAAAGTTTG TGTTTCCACT      420
AGCCAGAGTA GAAATAACTC ATAATGCATG GGTATCAGG TGGAGTCCTC CAACAGGTGT      480
TGCCTTAGTA CTGAGGTCAA ATTGTCCCTA GACCAAAGGC TTCTTTGGAC TTCCCCTAAC      540
AAAGCTTAAA GACAAGCCTT GGAAGGATCA AACTAATTTT AAGAACTTA ACTGTGAATC      600
AGAATAAAAC CCAATACCAT TTATAGGAAT ATAACAAAT CCATCAACAN ACNACATAAC      660
ACTCATAATT ACCAACATTC AGTAAAAAAT TACTGGAAAC AGAGAAATAT AAATTATGGC      720
CCATAATTAG GAAAAAAGGG TAATCATTAG AGGTAGAACT CGAG                                764

```

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 157 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:


```

GAATTCGGCC AAAGAGGCCT ACTAAGGACT TGTTCGGAA GGAGCTGACT GGCCAATCAC      60
AATTGCGAAG ATGAAGGCTC TGTGGCCGT GCTGTTGGTC ACATTGCTGA CAGGATGCCT      120
AGCCGAGGGA GAGCCGGAGG TGACAGATCA GCTCGAG                                157

```

(2) INFORMATION FOR SEQ ID NO:910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

```

GAATTCGGG CCGCGTCGAC AGAATAGACC TGGTTTGTA ATTATGGCCT GGATTTCACT      60
TATACTCTCT CTCCTGGCTC TCAGCTCAGG GGCCATTTC CAGGCTGTG TGA CT CAGGA      120
ATCTGCATC ACCACATCAC CTGGTGAAAC AGTCACACTC ACTTGTCGCT CAAGTACTGG      180
GGCTGTTACA ACTAGTAACT ATGCCAACTG GGTCCAAGAA AAACCAGATC ATTTATTAC      240
TGGTCTAATA GGTGGTACCA ACAACCGAGC TCCAGGTGTT CCTGCCAGAT TCTCAGGCTC      300
CCTGATTGGA GACAAGGCTG CCCTCACCAT CACAGGGGCA CAGACTGAGG ATGAGGCAAT      360
ATATTTCGTG TCTCTATGGT ACAGCAACCA TTGGGTGTTT GGTGGAGGAA CCAAACTGAC      420
TGTCCTAGGC CAGCCCAAGT CTTGCGCATC AGTCACCCCTG TTTCCACCTT CCTCTGAAGA      480
GCTCGAG                                487

```

(2) INFORMATION FOR SEQ ID NO:911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

```

GAATTCGGG CCGCGTCGAC AGTTACTGAG CACACAGGAC CTCACAATGG GATGGAGCTA      60
TATCATCCTC TTTTGGTAG CAACAGCTAC AGGTGTCCAC TCCCAGGTCC AACTGCAGCA      120
GCCTGGGGCT GAGCTGGTAA AGCCTGGGGC TTCAGTGAAG TTGTCCTGCA AGGCTTCTGG      180
CTACACTTTC ACCAGCTACT GGATGCACTG GGTGAAGCAG AGGCCTGGAC AAGGCCCTTGA      240
GTGGATTGGA ATGATTCATC CTAATAGTGG TAGTACTAAC TACAATGAGA AGTTCAAGAG      300
CAAGGCCACA CTGACTGTAG ACAAATCCTC CAGCACAGCC TACATGCAAC TCAGCAGCCT      360
GACATCTGAG GACTCTGCGG TCTATTACTG TGCAAGGGAC AGCTCAGGCT ACGACTATGC      420
TATGGACTAC TGGGGTCAAG GAACCTCAGT CACCGTCTCC TCAGCCAAAA CGCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

```

GAATTCGCGG CCGCGTCGAC CCAGGATGCC GCGCAGCAGA GCTCTGATTC TGGGGGTCCT      60
CGCCCTGACC ACCATGCTCA GCCTCTGTGG AGGTGAAGAC GACATTGAGG CCGACCACGT      120
AGGCACCTAT GGTATAAGTG TATATCAGTC TCCTGGAGAC ATTGGCCAGT ACACATTGTA      180
ATTTGATGGT GATGAGTTGT TCTATGTGGA CTTGGATAAG AAGGAGACTG TCTGGATGCT      240
TCCTGAGTTT GGCCAATTGG CAAGCTTTGA CCCCCAAGGT GGAAGTCAAA ACATAGCTGT      300
AGTAAACAC AACTTGGGAG TCTTGACTAA GAGGTCAAAT TCCACCCAG CTACCAATGA      360
GGCTCCTCAA GCGACTGTGT TCCCAAGTC CCCTGTGCTG CTGGGTCAGC CCAACACCCT      420
CATCATGCTC GAG                                     433

```

(2) INFORMATION FOR SEQ ID NO:913:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

```

GAATTCGCGG CCGCGTCGAC GCAAGATGGA TTCACAGGCC CAGGTTCTTA TATTGCTGCT      60
GCTATGGGTA TCTGGTACCT GTGGGACAT TGTGATGTCA CAGTCTCCAT CCTCCTGGC      120
TGTGTCAGCA GGAGAGAAG                                     139

```

(2) INFORMATION FOR SEQ ID NO:914:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

```

GAATTCGCGG CCGCGTCGAC ATCATGGCTA CCCTGCGTGT CCCACTCCTG GTGGCTCTCG      60
TCCTTCTTGC TGTGGCAATT CAGACCTCTG ATGCAGGTCC CTATGGTGCC AATGTGGAAG      120
ACAGTATCTG CTGCCAGGAC TACATCCGTC ACCCTCTGCC ATCAGC                                     166

```

(2) INFORMATION FOR SEQ ID NO:915:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:

```

GAATTCGCGG CCGCGTCGAC TTCTTGGGCA GCACAGAAGA CAGAGCCGAT TTTGACCAAG      60
CTATGTTCCC TGTGATGGAG ACCTTCGAAA TCAATGATCC AGTGCCCAAG AAGAGAAATG      120
GGGGGACCTT CTGCATGGCA GTCATGGCCA TCCACCTGAT CCTGCTCAGC GCAGGTACTG      180
CACTGCTGCT GATTCAAGTT CTCAATCTGC AGGAGCAGCT CCAGATGCTA GAGATGTGCT      240
GTGGCAATGG ATCACTAGCT ATCGAGGACA AGCCCTTCTT CTCGCTGCAG TGGGCACCCA      300
AAACACACCT GGTACCTAGA GCACAGGGGC TGCAAGCCTT GCAGGCCAGC CTCAGCTGGG      360

```

```

TCCATACCAG CCAGGAGCAA CTCCGTCAGC AGTTCAACAA CCTCACTCAA AATCCAGAGT    420
TGTTCCAGAT TAAAGGTGAA CGAGGCTCTC CAGGTCCAAA AGGGGCCCCG GGTGCTCCTG    480
GAATCCCCGG GCTGCCTGGG CCAGCTGCTG AGAAGGGAGA AAAGGGGGCT GCAGGTCGTG    540
ATGGAACCCC AGGTGTCCAA GGACCCAGG GCCCACCAGG AAAACTCGAG    590

```

(2) INFORMATION FOR SEQ ID NO:916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

```

GAATTCGCGG CCGCGTCGAC GGAAGAGCAA TGAAAACATA TGCTCCTACA TTATTCATGT    60
TTCTATGGCT GCAGCTGGAT GGGATGAGCC AAGGTGAGCA GGTGGAGCAG CTTCTCTCCA    120
TCCTGAGAGT CCAGGAGGGA TCCNGTGCCA GCATCAACTG CACTTATGAG AACAGTGCCT    180
CCAACTACTT CCCTTGGTAT AAGCAAGAAC CTGGAGAGAA TCCTAAGCTC ATCATTGACA    240
TTCGTTCAAA TATGGAAAGA AAGCAGACCC AAGGACTCAT CGTTTTACTG GATAAGAAAG    300
CCAAACGTTT TCCCTGCACA TCACAGACAC CCAGCCTGGA GACTCAGCCA TGTACTTCTG    360
TGCTGCAAGT GAGAGCACCA ATACAGGCAA ATTAACCTTT GGGGATGGGA CCGTGCTCAC    420
AGTGAAGCCA AACATCCAGA ACCCAGAACC TGCTGTGTAC CAGTTAAAAG ATCCTCGGTC    480
TCAGGACAGC ACCCTCTGCC TGTTCACCGA CTTTGACTCC CAAATCAATG TGCCGAAAAC    540
CATGGAATCT GGAACGTTCA TCACTGACAA AACTGTGCTG GACAATCTCG AG    592

```

(2) INFORMATION FOR SEQ ID NO:917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

```

GAATTCGCGG CCGCGTCGAC GAATGAGGTG CTCTCTTCAG TTCCTGGGGG TGCTTATGTT    60
CTGGATCTCT GGAGTCAGTG GGGATATTGT GATAACCCAG GATGAACTCT CCAATCCTGT    120
CACTTCTGGA GAATCAGTTT CCATCTCCTG CAGGTCTAGT AAGAGC    166

```

(2) INFORMATION FOR SEQ ID NO:918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

```

GAATTCGCGG CCGCGTCGAC GTCTGAGAGG AACCCCTTCTC TGAGGATGGA CACTTCTCAC    60
ACTACAAAGT CCTGTTTGCT GATTCTTCTT GTGGCCCTAC TGTGTGAGA AAGAGCTCAG    120
GGACTGGAGT GTTACCAGTG CTATGGAGTC CCATTTGAGA CTTCTTGCCC ATCAATTACC    180

```

TGCCCCCTACC CTATAGTGAG

200

(2) INFORMATION FOR SEQ ID NO:919:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCGCGG CCGCGTCGAC CCAACCTTCC GGAAGCCTCC CCATCAGCAC CATGAACCCA	60
AGTGCTGCCG TCATTTTCTG CCTCATCCTG CTGGGTCTGA GTGGGACTCA AGGGATCCCT	120
CTCGCAAGGA CGGTCCGCTG CAACTGCATC CATATCGATG ACGGGCCAGT GAGAATGAGG	180
GCCATAGGGA AGCTTGAAAT CATCCCTGCG AGCCTATCCT GCCCAGTGT T	231

(2) INFORMATION FOR SEQ ID NO:920:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 115 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCGCGG CCGCGTCGAC GTTTTGTAT TGTTACGAAG TAAATGATTC GTATGCTGTA	60
CATAGCTGTT ATAGAAGTGG CGATTAGTGT AATTAGTAGG GCTCAGGCTC TCGAG	115

(2) INFORMATION FOR SEQ ID NO:921:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 213 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

GTTGAATTCT AGAAATCAAA ATTAATTGA CAAAGGAAAA GCAGATGCCG GAAACTTCTT	60
CCCAGTCTGT CATACAATTC ACCACTGGCC AGGTGCTGAG AGAAGCATTG GGGAAACAGTG	120
TGGGTTGTGT CAGAGTTGGA CGGCTCCATC CCTTTGGCTT CATTATCTTC CTCTCATGG	180
AGATTCTAAA GCAACCCGTC GACGCGGCCG CGA	213

(2) INFORMATION FOR SEQ ID NO:922:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 504 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

```

GAATTCGGCC AAGAGGCCTA CTTAGAAGCC AAAGAAGGAG ATTTGCACAG GATAGAAATC      60
CCATTCAAAT TCCACATGCT GCATTCAGGG CTGGTCCACG GCCTGGCTTT CTGGTTTGAC      120
GTTGCTTTCA TCGGCTCCAT AATGACCGTG TGGCTGTCCA CAGCCCCGAC AGAGCCCCCTG      180
ACCCACTGGT ACCAGGTGCG GTGCTGTTC CAGTCACCAC TGTTCCGCAA GGCAGGGGAC      240
ACGCTCTCAG GGACATGTCT GCTTATTGCC AACAAAAGAC AGAGCTACGA CATCAGTATT      300
GTGGCCCAGG TGGACCAGAC CGGCTCCAAG TCCAGTAACC TCCTGGATCT GAAAAACCCC      360
TTCTTTAGAT ACACGGGCAC AACGCCCTCA CCCCACCCG GCTCCCACTA CACATCTCCC      420
TCGGAAAACA TGTGGAACAC GGGCAGCACC TACAACCTCA GCAGCGGGAT GGCGGTGCA      480
GGGATGCCGA CCACCAGACT CGAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

```

GAATTCGGCC AAAGAGGCCT ACATTCATCA AGTCATCCAA CTCTATAGT CAAAGCAGGA      60
TCATGTGGCG AAGCATATGC TCCACAAGGG TGGATAGCTT TTTTCATGGA ATTCTCGAG      119

```

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

```

GAATTCGGCC AAAGAGGCCT AAAGAGAGTG GAGGAGGAGG ACAAGATTGA TACTATGAGA      60
GTTGGAGGAC ATAATTCATG GATCATAGCT CCAGAAGTGA AAAGGGAGGA AATGTAGACA      120
GAGGAAGGCA TTAGCCATTG AGAAGAATAG GGACATATTT TCTTTACTCT CTGTGCAGAG      180
GAAGATAGCT GGGGGAGTAT AGACAAGTTG TAAGAATGAA GGAAGGAAGG CAAGAGCAGA      240
CTTGTCGGA GAATTTTATT TTCTCTATGA AGTTTGAGAA TTAAACTTTA TGCTGAGAAG      300
GAGGGCAGGA GAGACTGTAT ATGGAATGTA AGGTTTGGA TAACCAATGT AAGTTTGGG      360
AATGAGAAAG CCACCTAGGG ATGAGGAAAA AATATTTAAA ATTTTGTATC CACTGAAAAT      420
TCTTCAACAG TGTAATATGA AGCATGCTCA ACTGGAAATG GTCATATATC TAAAAGAAAA      480
TGGATTATTT TTGTTATTTT TCTCTATATT TGTAGTATTT TACAGTAAGC ATGTATTACC      540
TTTATAGTGA AAAAGTGTC TTTTATTACA TTGGTCAATT TTTTGTATT AAATTCATG      600
CTTGTTTTTA ATTGTTTCTT GTGTGTATGA TTGCAATATC AGGTATTTGA TGTGGTGATG      660
TGTGTGATTC AGAAGTCAGA AGACTTAAGT TCCGACACCC CTCGAG                                         706

```

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 651 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

```
GAATTCGGCC AAAGAGGCCT AGGATTCAAA TTATTCTGAC AGACCTGTGT GGCAGTTCAG      60
GCTGATAGCT GGAGTTTCTT GTCTTTTCTT ACATGGCCTT TCATCTTCCA AGAGTTAGAC      120
TATGATTCTT CACATCATGA TGGCTTAGGG TCCCAAAAAG AAAAGAGTAG AACTTGCAAT      180
ACCTCTTAAG CCCTATGCCC AAGAACTCAT ACAGTGATAC TTCTGCCACC TTGTGTTAGT      240
CAAAGCAAGT CACAAGGCCA GCCAGATTCA AAAGAATGGA AAAATAGACT CAATTTCCTG      300
GTGAGAAGTA GCAAGGTCAC ATTGCAAAGG AGTCTGGACA TGGGAAGGAG TTAGTCAATT      360
GTGGCCTTTA TAATAATCTT CCACAAATGC CTGTAATTTG GGCACTGTGC TTAGTACTGG      420
TGATAGAAGA TAAGTAGCTT ATTTCAATAT CTTAATTTTG TTTTATATAT TTGATAATTT      480
TATGATGCAG GTTCACTGTG CACTGGTATC AATCCCAGGG GAGGACTGTA AACACCTTGC      540
CAATACTGTG TACCAGTA.C AATCCACTGG CATGAGTCTG GTGAGACAGA ACACACAATA      600
AGTTTAGGGA AGCAACTTTA TTAATCAAG ACAGGCAGCA AGGGACTCGA G              651
```

(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 700 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

```
GAATTCGGCC AAAGAGGCCT AAAAGATGA AAGGACCAAT CAAAGATTTA ATTAAAGCTA      60
AAGGGAAAGA TTTAGAGACA GAGAATGAAG AAAGAAATTC TAAGTTGGTG GTGGACAAAC      120
CAGAACAGAC AGTGAAGACC TTTCCACTGC CAGCTGTTGG TTTGGAAAGA GCAGCTACTA      180
CAAAGGCAGA TAAAGACATC AAGAATCCAA TCCAACCATC CTTCAAATG TTAATAAATA      240
CTAAACCAAT GACTACTTTC CAAGAAGAAA CCAAGGCTCA GTTTTACGCA TCAGAGAAAA      300
CCCTCCTAAA AGAGAACTTG CCAAGATTT GCCTAAATCA GGAGAAAGTC GATGTAATCC      360
TTCAGAAGCT GGAGCGTCTT TACTGGTTGG CTCATAGAA CCTTCTTTGT CAAATCAAGA      420
TAGAAAAATAT TCCTCAATTC TACCTAATGA TGTACAACT ACCTCTGGTG ATCTCAAATT      480
GGACAAATTT GATCCCCAAA GACAGGAAAT TCTAGTAAA TTAAGGATG TGCCTACTGG      540
TGATTGTCAT ATTTCTCCAA AGAATGTCAG TGATGGGGTT AAAAGGGTAA GAACATTATT      600
AAGCAATGAG AGAGATTCCA AAGGCAGGGA TCACCTCTCA GGAGTCCCTA CTGATGTTAC      660
AGTTACTGAG ACTCCAGAAA AGAACACAGA ATCCCTCGAG              700
```

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 378 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

```
GAATTCGGCC AAAGAGGCCT AGGGGTGGTG GAGGCGTGGA CCCAACGGTG ACCGTCGGGA      60
TGGAGCAAGG GCAAGGAGAG GCTCTGGCCC AGACACAGCT TGGAAAAGCT CATCTCCCTC      120
TGGGGTTTAA AAATCAAAAG CAAACGGAGC AAGCCTGGCG GCCCTGGGGA TGGGGCAGGG      180
```

```

CCTCTACCTC ACTGTGATCT TCGACCTGGC GACACAGGAC AGCCACACAG AAGCACGCCA 240
ACACACTTAA AGCTTTGCTC CAACTAAATC ATTTAGTTTC CCTTGAAGAA ATAAGTGAAA 300
AAAAAAACAA CTGCTGACAT CTATGTCTGT AGCTCGATTT TACAGTCTGC TCTTTGTGAG 360
AAAGGAAAAT CACTCGAG 378

```

(2) INFORMATION FOR SEQ ID NO:928:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

```

GAATTCGGCC AAAGAGGCCT AATATTTTAC ATTTCTCTTT TCTAAAAGTG TAAATTTTTC 60
ACTTTTAAAT GAAGCAAGAA TTAAATAAAT AGAACAAATA CCATATATCA TCACAGAGTC 120
AATATATTAT GGTCTGTTC TGACCAAGTG TTGCATTGTA TTTGTGTTAC CAGAACTGCA 180
GGGCTTTCTA TGGCTACATG GTCAGTGCAT GCTCAGACAG CTGTTAAAT CAAAACCTTC 240
ACTGTGCTGG GTCACCTGGT AACTACTGTC TATCTCACAA GTGCATTCTG CTGACATTCA 300
AGGGTTAAAC TGGTTTCTAG TAAATACTGT GCTTTAAAGT AGTACATACT GTGAGCTGTG 360
TTATTAGAAA CTGCTTGTC CTTGTGTCTG AAAATAAGGA GGAACACTCT CGCACCAAAT 420
CTCGAG 426

```

(2) INFORMATION FOR SEQ ID NO:929:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

```

GAATTCGGCC AAAGAGGCCT AGGTAAATGT TAGTGGAATA TTTTATGAGT ATATGCTGAA 60
AGGAGAGATT AGTTCACATG AACTCAATAA TGTTCAAGAT AATGAAATGC TTAGAAAGGT 120
TACTTTTGAT CCAGAAGTAT TTTTCAACAT ATTACTTCCT CCTATCATAT TTTATGCAGG 180
TTATAGCCTG AAAAGGAGAC ATTTTTTTCG AAATCTTGGG TCTATCCTAG CATACGCTTT 240
TCTTGGAACA GCAATTTCTT GTTTCGTTAT TGGGTCAATA ATGTATGGCT GTGTAACGCT 300
GATGAAGGTA ACGGGACAAC TCGAG 325

```

(2) INFORMATION FOR SEQ ID NO:930:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

```

GAATTCGGCC AAAGAGGCCT ATGGACACCC TGTGCCCCAA GCCGATGGCC CCACCCAGCA 60
GCATCAGCAC AGNTGCCCCC CTTCTCGCA GAGCAGGCTC TCCTTTACGG GACTCTCCTC 120

```

TTCCTCCCA	CCTGATGCGC	ATCAGCAGCC	ACGGGCCTGG	CCCTTGAATC	TTGTCTAACT	180
GCACTCGCTG	CCTGGTGGCC	TCATCCCACC	CCAAGACCAC	TGCACTGATG	GCTCCAACCC	240
CAACTTCTCC	CTGCACTCAG	CTTATGAATA	CGACGGCCCT	CATTGCATCC	ATGCAGAGAC	300
CTCAGAGGCA	GCTCAGCTCA	GTGCTCAGCG	TGGCACTCGG	GGCTTCACAC	TTCCCCCGT	360
GTCTGTCTG	AGAAAAGTGT	GACACCATCA	ACCCAATAA	CTCGAG		406

(2) INFORMATION FOR SEQ ID NO:931:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

GAATTCGGCC	TCATGGCCTA	CCAGACTGTA	AACATTCCAG	GTCTGAAAA	AGTGTGGAC	60
CAGTCTCCTA	CTGTTATGTT	CTCCAGTTTT	AAAAATGTAA	AATCAGTTGA	AACACTCGAT	120
CAGAAGGCAG	ATGAAGTCCT	TGACTGTCAG	AGTAACCAAA	ACAGACCAGA	TGAATGCAAA	180
AGTGAAGGTC	AGTCAGCCAA	GGAGATGCTA	AGTAGTGACC	AGAGAGAGAC	TGTCACCGGA	240
CTCGAG						246

(2) INFORMATION FOR SEQ ID NO:932:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

GAATTCGGCC	TTCATGGCCT	ACTCCATTGT	CAGGCCAATT	TCCCTAGTC	CAAGTTTTTT	60
CTTTGCTGAT	TCCTTTGTCC	ATGTGTGCTT	TGAGCCTCTC	TCATCTTGTC	TTTCCTCCTT	120
TCCTAGGAGC	AGCTCCTGAA	GCAGCAGCAG	CAGCACCAGT	GGCAGCAGCA	TCAACAGGGC	180
TCTGCCCTTC	CTACCCAGT	GCCCCATCA	CCACCACAGC	CTGTGACCCT	GGGGGCTGTG	240
CCAGCTCCAC	AGGCTCCACC	CCCGCCCCAC	AACCTCGAG			278

(2) INFORMATION FOR SEQ ID NO:933:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

GAATTCGGCC	TTCATGGCCT	ACGAGTGCGA	CCAGCCAGAT	GAGCGCCCGG	TCCTGGTGAA	60
GAGCAATCAC	TACCTCTACT	TCTCCATGAT	CCTGTCCACG	GTCACCCTCA	TCACTGTCTC	120
CACCGTGAGC	TGGTTCACAG	AGCCACCCTC	CAAGGAGATG	GTCAGCCACC	TGACCTGGTT	180
TACTCGTCAC	GACCCCGTGG	TCCAGAAGGA	ACAAGCACCA	CCAGCAGCTC	CCTTGTCTCT	240
TACCCCTCTCT	CAGAACGGGA	TGCCAGAGGC	CAGCAGCAGC	AGCAGCGTCC	AGTTGAGAT	300

GGTTCAAGAA AACACGTCTA AAACCCACAG CTGTGACATG ACCCCAAAGC AGTCCAAAGT 360
 GGTGAAGGCC ATCCTGTGGC TCTGTGGAAT ACAGGAGAAG GGCAAGGAAG AGCTCCCGGC 420
 C 421

(2) INFORMATION FOR SEQ ID NO:934:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

GAATTCGGCC AAAGAGGCCT AAAATAGCAA AGATGGAACA TGGACCTAAA GCAGTGAATA 60
 TTGCAAATTC TCCATCAAAG CCTTCAGAAA AGGATTCTGT AGTTTCCCTT GAGTCCCAGA 120
 AGACACCTGC TGACCCAAAA CTGAAAACCT TAAGTCAAAC CAAAAAAGC AAAGGATCTG 180
 ATAGCTCACT CTCTGGTAAC AGTGATGGCG GAGAAGAATT TTGTGAAGAG GAGAAGGAAT 240
 ATTTTGATGA TAGCACAGAA GAAAGGTTTT ACAAGCAGTC TTCCATGTCT GAAGATAGTG 300
 ATAGCGGTGA CGACTTCTTC ATTGGGAAAG TCAGACGGAC ACGAAAGAAG GAAAGTAGTT 360
 GTCATTCTTC AGTTAAGGAA CAAAACCCAC TAGAAAAAGT GTTCTTAAA GAAGATACAG 420
 GTGAAACTCA TGGGATACA ACTCTCGAG 449

(2) INFORMATION FOR SEQ ID NO:935:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

GAATTCGGCC AAAGAGGCCT AAAAATAGTG ATTTTGTGAC TATCTATAGA TATTAGTTGG 60
 CATTCTACTG TAAGGAAAAC TTTCTTTTCT CCTGTACTTA TTCATCGTCC CCCAGGAATC 120
 AGTCATTTT CCAAGGAGAC CTAGTTCCTT TTTGTGAGGA GTTGTTTTGA GTTCATTTTG 180
 AAGTTCATTT GAAGTTTGA GTTCATTTTA CTATAATCTG CCTAGGTGTG ATTTTCTTTT 240
 TATTTATTCT GCTTAGGATT TGCAGAGATT TTTTGAACC TGTGGCTTGA TGTCATCAC 300
 TTTTGAAAT TTCTCAGCCA GCATAGTATC TGCAGACTGT GTGTCTGTTT CATTTTCTCT 360
 CTTTCTCCT TGTAGGACTT CATTACAAG GATGTTAGAA CTTTTTACCA TGGCTCTCGA 420
 G 421

(2) INFORMATION FOR SEQ ID NO:936:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 648 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

GAATTCGGCC AAAGAGGCCT ACAGGTCTAC TGGTAATGAT TTCCTTTACC TTCTAATTAT 60

```

ATAGAAATGT CATAATTTCT CCTTTATTCT TGAATGATAG TTTTGTGGGA TATAGACTTG      120
CTGGATATAG AATTACTGGA TATAGAAATG CCAGATATAA AATTCTTGGT TCAAAGTTTT      180
TTTTCTTTGA GGAAGTTTGA TGTCATCCCA CTGTCCTTCTG GCCTCCATAG TTTCTCATAA      240
TAAATCAGCT GTTAATCTTC ATTAAGTTTC CTCTGTACAC GAAGAGTCAC TTGTCTCTTG      300
CTGCTTTCAA ATTTTCTCA TTTGCTTTGG GTTTTCACAC TTTAATTATA TGCCTTTCTA      360
TGTGGATCTC TTTGAGTTTA TCCTGCTTGG AGTTCATTGA GCTTTTGTGA TCTGTATATT      420
AATTTCTTTC ATCAGATTGG GAGATGTTTT TGGCATTAT TCCCTCAAAG TTCTTTCTGC      480
TTCTTTCTCT CCTTCTCCTT CTGGGTCACC ACAATGCATA TGTGGTCTA CTGTATGATG      540
TCTCACAGGT TCCTTAGACT CTGTTTACTT TTCTTCATAT TTTTCTTTT CTGTTTCTTA      600
AATTTGGATA ATTTTGGTTG TCTTATATTC AAGTTTGCTG ATCTCGAG      648

```

(2) INFORMATION FOR SEQ ID NO:937:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 160 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

```

GAATTCGGCC AAAGAGGCCT AGAGGATGGG AAGCTTGGGG AGAGAAGATA CTGAAATGCT      60
AGAAACTGAG CCAGTAGAGG ATGGGAAGCT TGGGGAGAGA GGACATGAGG AAGGATTTCT      120
GAACAACAGT GGGGAGTTCC TCTTTAACAA GCAGCTCGAG      160

```

(2) INFORMATION FOR SEQ ID NO:938:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

```

GAATTCGGCC AAAGAGGCCT AGAAAACTC AGGAAAGAAA TTGCAGACTT CGAACAACAG      60
AAAGCAAAG AATTAGCTCG AATAGAAGAG TTAAAAAGG AGGAGATGAG GAAGCTACAA      120
AAGGAACGTA AAGTTTTTGA AAAGTATACT ACAGCTGCAA GAACTTTTCC AGATAAAAAG      180
GAACGTGAAG AAATACAGAC TTAAAAACAG CAAATAGCAG ATTTACGGGA AGATTTGAAA      240
AGAAAGGAGA CCAAATGGTC AAGTACACAC AGCCGTCTCA GAAGCCAGAT ACAAATGTTA      300
GTCAGAGAGA ACACAGACCT CCGGGAAGAA ATAAAAGTGA TGGAAAGATT CCGACTGGAT      360
GCCTGGAAGA GAGCAGAAGC CATAGAGAGC AGCCTCGAG      399

```

(2) INFORMATION FOR SEQ ID NO:939:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

```

GAATTCGGGC AAAGAGGCTA GAAGCATCGA AAGCGTTGGA GAGGTGTAC CGGTAACGGC      60
GGCGAGAAGG GTGTTCCCGA ACTAGAGTGG GGCATACATA ATCTTGCTGC TATGCTTCGA      120
AGCTGTAGTC TGAATCAACC TAAGTTTAA ACAGAAGGTG AACCTCTGAG ATAGAAAATC      180
AAGTATATTT TAAAGAAGG GATGTGGGAT CAAGGAGGAC AGCCTTGCCA GCAGTGGCCC      240
TTGAACCAGC AACAATGGAT GCAGTCATTC CAGCACCAAC AGGATCCAAG CCAGATTGAT      300
TGGGCTGCAT TGGCCCAAGC TTGGATTGCC CAAAGAGAAG CTCAGGACA GCAAAGCATG      360
GTAGAACAA CACCAGGAAT GATGCCAAAT GGACAAGATA TGTCTACAAT GGAATCTGGT      420
CCAAACAATC ATGGGAATTT CCAAGGGGAT TCAAACCTCA ACAGAATGTG GCAACCAGAA      480
TGGGGAATGC ATCAGCAACC CCCACACCCC CCCCTCGAG                               519

```

(2) INFORMATION FOR SEQ ID NO:940:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

```

GAATTCGGCC AAAGAGGCCT AAGAAATTAT ACCATTTTAT GGAATGTCAA GCTACATCAC      60
CCGAGAAGAC CAGTACAGCA AGCCTCCGCA CAAAAAATG AAAGACCGCC AGATCGATCG      120
CCAGAACCGC CTCAACAGCC CTCCTTCTTC TATCTACAAA AGCAGCTGCA CAACAGTATA      180
CAATGGCTAT GGGAAAGGCC ATAGTGGTGG AAGTGGCGGA GGCGGCAGCG GTAGTGGTCC      240
CGGAATTAAG AAAACAGAAG CGCTCGAG                               268

```

(2) INFORMATION FOR SEQ ID NO:941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 535 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

```

GAATTCGGCC AAAGAGGCCT AAGCCTCGCC TTACACTTAA GTGCACCCGA TCCTGCCTCT      60
GGCATCTCAC AAACGTCAC CCCTGGAACA AATTGTGAA GGCCTCCAGA CCACAGTGTG      120
CTCATCTGTA AAATGGGGGT AGTAGTAATC CTTGCCTCAT AAAGTTCTTG GCAAGGATTA      180
GATGAGCGAG CATGTGAGTT TGGCCTCCGT TTAACACTC CATAAAGTTT CCTTTTAGGA      240
TAACAGCAGG CCGTTTTAGA ACCTTCCAGA GGTTACTTAT TCAGATATCC TTAGGTGACG      300
ATTGGGAAGC TGCCGTTTCT TGAGAGCCTC CTGGGTGACA GATGGAGAGT GGCCCTGGCG      360
TGACCCCTGA CCCTATCCTT GAGGCTTTCC TGCCCGTCTC CTGCCTCGAA TGTGCTCCGC      420
AGCACATGGA TCAGGATGGG GAAGGGGCTG TGTCACTGGA TACCTTCGGC CCCTGCCCAC      480
GTCTAGGGCC TGTGAAAACG AGGAGGGACA GCAAAGAAAT GGGGAAAGGC TCGAG                               535

```

(2) INFORMATION FOR SEQ ID NO:942:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

GAATTCGGCC AAAGAGGCCT AAAATTGTGA ATTCTAGTCA CCCTGCAGTG CTATAGAACA	60
CTGGAACTTA TTCCTCCTAT ATCACCCTAT TTTGTATCT ATTAACAAAC CTCTCCATAT	120
CCTCCCTCCC TCCTACCTT CCCAACCTTT GGTAATCACT ATTCTCCTCT CTACTTCTAT	180
GAGATCAATG TCTTTATTTA CTCGAAGTAC TCTTAAAAGT TTAGGACTTA AGTATTGAA	240
GAAATTCAC TGCCTTTTGT TTTTATTCTA CTCAATACTT TTTAATATAA AGATTACAG	300
TCCCCCCTTA CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:943:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

GAATTCGGCC AAAGAGGCCT ACAAACTCAA GATGCCCGAG TGGATTGGAG GCGAGAGCGA	60
GCTCAGGAAG TTTCTAAAAC ATCATTTCG AGGAAAGAAC TGTGAAGTCC TGCTGGTGGT	120
ACCAGAAGAG GTAGAGGCTC ATCAGAGTTG GAGGACCGAT GTGTAACAGT TCTGCCCAAC	180
CTCCCTCTCG CCTCAGCCCC TTCAGTCCTC TGTGACGTGC TGTGGCCTCT ACAGTGGGTC	240
TGCCCTTGCC ACTTCCCAA ACATCTCATC AAGTTTTTCC CTTTCAGATC TGACAGTGCA	300
ATAGGACAGA CGTGTGGA CTGTATAAGAA CTACTCAGTG TTTTGTTCCT GGGCAAAC T	360
GAG	363

(2) INFORMATION FOR SEQ ID NO:944:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

GAATTCGGCC AAAGAGGCCT ACTCTGACAG TGTTTCTGAC CTTTAGCATT TCTTTTGGAT	60
TCTTCTTAG AATTCTCATC TTCTGCTTAT ATACCTGTCT ATTCTTGCAT GCTGTCTACG	120
TTTCCCATGA GAGTCCTTAG CACATTAATC ATGGTTGTTT TACATTACA GTCTGGTAAT	180
TCCAGCATCC CTGCCACATC TGAATCTAGT TCTGATGCTT GCCCTGTCTC TTCAAAC TCT	240
GTTTTTTTGC CTTATAATCT TTTGTTGAAA GCCGAACATG ATTCCTGTAC TGGCTCTTCT	300
GGAGGCTTCT GCCCTGTTCT CGAG	324

(2) INFORMATION FOR SEQ ID NO:945:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 712 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

```

GAATTCGGCC AAAGAGGCCT ACAGATGACT TCATTCTCT TGGATTCCAC TTTCTCACGT      60
GTCAGAAATGG GAGAGGAAGG GAGGTGTTGG GATAAGTTTC AGTTCCACTG TTTGTACTTC      120
TCGTCTGGCT AACACCCATG TGGCAAATAG GTTTCATCAT TTGTTTCAGC TTAGATTGTG      180
TGACAGCGGT TTCCTGGAGT GCTGTCTTGA GAACGATTCT GAGGAGGCTC AGCAAGAAAG      240
AGTGTTTCAG TTGATTGGGT GTGTCTGTCA TGGAGAAGGA AGTAAGGAGT GGGCAGTGCT      300
AGCAAAATTC CCGGGGCACT TCTGTCCATT ATCTCAATAC CTGGGGTTGA CATTTCTCTGT      360
CTCAGATCAG GAGTCCTGAC TACCCTGCCT CTGACCACTC GAACTGAGTG CTGCTTAGCT      420
GTATCGTAGA CACCGCTGT TTGTGAACAG ACACCCTGCT TCTTGATAAC ACAAAGGCCA      480
GCAGGGTCCA CTGCTGTGTG GAATGGCCTT CGGTCATTTC TGCCCAAGAGC ATAGAGGTCA      540
TTTTCACTAA TAACATAACT CTCCTTTTGA TTGAAAGTGT TAAAATGTTT CTCCTAAAAG      600
CACTTATTTT TTAGGCTCGT TCTTCAGATT TGCCCCATAT CCTAAGCAAA ATGCCTTCAA      660
TATGAAGTGG ATATTGCTTG ACCGTAGGGA GCTTGTCCAT ACTGTACTCG AG              712

```

(2) INFORMATION FOR SEQ ID NO:946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

```

GAATTCGGCC TTCATGGCCT AGTCTGAAG GATAAGACTT GCCCAAGTGG ATAAGGGGCG      60
AAAGGCATCC CAAGAGGAGA CAGTAACGTG TGTATAAATG AACGAAGGCG TGAAATAGGA      120
TGGAGTGTTT TGAGGAACCA CAAGTAGCCT TCTCTGAGTA AGAGCATAGG TTTGTGAGGA      180
GGACCTAGTG TTGTTTGAAA AAAGAGAGTG ATCAATGGAA GATGAGATAT CAAGACAGGA      240
GAACCAAGGA AGAAAAAGCA GAGGACAGCT GGAATGAATC AAACCAAGA ACCAGGATCC      300
TCGAG

```

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

```

GGGTTTGTGTT AATGGAAAGT TTAAGTAAAT TATATTGTAA TAAAAAGGTA GATAAACCAT      60
TGTACAACAG TATTCTAGGC CGCCAACAAA AGTGTGACAG ACACACTAAA AGCCCTCCAA      120
CTTTAACTTG TAACGTAGCT TCATTCTCAA AGCTGACTCC TTTTCTTTCT TTTTCTTTT      180
CTTGAGTGTA GTACAGTTAA AATTTCAAAC AGCTCCTTGA CACTGCTTTT CATGTTCAAA      240
CCAGCCATTT TGTGTACTT TGGTAAAGGA CCTCTTCCCC TTCCTCCCCT ACACATACAG      300
ATACACCCAC CATAACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

```
GAATTCGGCC TTCATGGCCT ACAAAGGCA ACAAACAAGA TTAACATGGA ATTATAAAAA    60
TCACTCAATC CAAAATAAGG CAGAAGAAGT GGAAAAGGGA GATGAAGATC AGATGGAACA    120
AAGAATATTA CTAGAAATGA CTATGTTTTA TAATGCAAAA TAGTTCAGTA CAGGAGAAAG    180
ATACAATAAT TTGAGTGCAT ATGAACTTAA AAGAGAATTT CAAAATATAT GAAGCAAAAA    240
TTGACAGAAC CCAAAGGCA ACAAACAAGA TTAACATGGA ATTATAAAAA TCACTCAATC    300
CAATATCTCG AG                                     312
```

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

```
GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGGGA GCCTCAAGAA AAATTAGCAG    60
AGGAAAATAA TAGGTAGTTA CTATTAGGG TAAACTAAAC TGTCTAAGG AATAGAAAAT    120
AAAAATTCCA TGTCTTCAAA AATAATTCTT CCCTCTCAAT CTCTCTGAAT ATCTCATAAG    180
AGTATTCAGG CCACAGAAAT AACTACCATT TAGCCACTCA GAGGCTTATA GTAGTTCTAC    240
TAACTTTAAC ATTTGGCAAC CAAAATTACT CTAAGAATCA TCACCCTCGA G          291
```

(2) INFORMATION FOR SEQ ID NO:950:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

```
GAATTCGGCC TTCATGGCCT AGATGGGCAT TCTGTTTATC TTACTAGTAG TACGCAGGGT    60
ATGTTGAAAT CTCCAATGT GATGGTGGAC CTGTCAACTT CTCCCTGTGG TTTTATCAGT    120
TTTTCTGGG TATTTTGAGG CTATTCTGAT AGGTACATAA AATACAAAAA TTGCTATATC    180
CTCCTAATTA ACACTTATTA TCAAATTGTT ACTAATGCTT TCTGTTCTTA GGCCATGAAG    240
```

(2) INFORMATION FOR SEQ ID NO:951:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

```

GAATTCGGCC TTCATGGGCT AGATCTGAGC TCACTGCAAC CTCTGCCTCC AGGGTGAAG      60
CCATTCTCCT GCCTCAGCTT CCCAAGTAGC TGAGACTACA GGCCTGTGCC ACCACGTTGG      120
CTAATTTTGG TATTTTGTAG AGCTTTT TTTAAACCCT GAGTGTGAGG TGTGAGGTAG      180
TAGAAGAAAG GTAGTGTGTG TGACAGCTTG TGAGTACTTA ACTAATTCTT GTTGCAATTCA      240
CTATAATATG GTAGTGTGTG ATACATTAT AGGCAATTAG GAATAGGGAA CAGAATCAGC      300
AGATACTAAC GGAGTTAGAG ATGTTTGCTG AAGTCATGGA AAGCCATCAT TACTTTTTC      360
TTCCTTCCTC ATAAGGCCTT AGTGGGTGTG GCGTTCAGCT CGAG                        404

```

(2) INFORMATION FOR SEQ ID NO:952:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

```

GAATTGGCCT TCATGGCCTA GAAAATCAT GTGGGAAAAC CACTGCTGAA AATGGATTTA      60
AATTCAGAAC AGGCGGAACA ACTGGAAAGA ATCAATGATG CTCTTTCCTG TGAATATGAG      120
TGCCGCCGAC GAATGTTAAT GAAACGATTA GATGTGACTG TACAGTCCTT TGGATGGTCT      180
GATAGAGCAA AGGTAAAAAC AGATGATATA GCAAGAATTT ATCAGCCTAA GCGTTATGCT      240
TTGTCACCCA AGACAACGAT TACAATGGCA CATCTACTTG CTGCTCGTGA AGATCTATCC      300
AAGATCATTG GGACAAGTAG TGGCACCAGC CGGGAGAAGA CCGCATGTGC CATTATAAAG      360
GTGCTGATGG GAAGGGCTCG AG                                         382

```

(2) INFORMATION FOR SEQ ID NO:953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

```

GAATTCGGCC TTCATGGCCT AGTCCCTCTT CCACTGCATT TCGGCTTCAT ACATGCACAT      60
GATGTCCTCC TCCTTGCACT CAGTGATGTC TGGCAGCGG CCGTACTGCC GGTGGTAGTA      120
GTAATACCTG TTCTTTGCGT GCTGCCGCTC TATAAATTCT CTCACGAGGG TCACGGGTGCG      180
GTCCACGATG AGGTGGAACG CTTTCATCAT GTAGACGATG GGATTGGGCT GCACCGGCGT      240
GCGGCGCGGG GGCTCAGGCT CGCTCGAG                                         268

```

(2) INFORMATION FOR SEQ ID NO:954:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

```

GAATTCGGCT TCATGGCCTA AAGATTCTGC TCTTTATACA CAGAACTTGG TATAGAGTTC      60

```

TGGAATGAGG AAGTGTGAGG AGGGAATCAG TGCCTCTCGG AAGTCGTTTT AATTAGAATG	120
TGATTTTTTT TTCTTAAACG TGTCTTCATT GGCTCCCAGA TTTGCCGTAG AAACCAAGCA	180
AACTGGGTGC TAAACAGAA AGGCCATAG ATTGTACTTT TTGAGCTGTT TGAATTGTA	240
TACCATATGC ACAACTCGAG	260

(2) INFORMATION FOR SEQ ID NO:955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 129 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

GAATTCGGCC TTCATGGCCT AATCCGAGTG TTTCGCGCAC GTCCTAAGCT GACAGTCCCT	60
CTGGACAGAG TCCCTGGAGT GGAGTCACTG CTCCTGTCT TTTTTCATA ACATACACTC	120
ACCCGTATG	129

(2) INFORMATION FOR SEQ ID NO:956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

GGCTAAACAT GGAAATGAAA GACTGATACT TGCTACCACA AAAANANACT TAAGCACATA	60
GATCATAGAC AGTATAAAGC AATTAGACAA TGAAGTCTAC AAAACAACCA GTTAACAACA	120
CAATGAGAGT ATCAAAATCT TACATGTCAA TACTAACCAT GAATATAAAT GATCTAAGCC	180
CCCCACTTAA AAAGCATAGA GTGGCAAACCT GGATAAAGAG ATAAGACCCA ACTGTCTGCT	240
GCCTTTGAGA GACCCATCTT GCATGTAGTG ACACCCACAA GCTGAAAGTA ATGAGATGGA	300
GAAAGATCTA TCATGCAAAA GAAAAACAAA AAAGAGCAAG TATCACTATT CTTATATCAG	360
ATAAGACAGA TTTTAAACCA ACAACTATCA AGAAGAACCT CGAG	404

(2) INFORMATION FOR SEQ ID NO:957:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

GAATTCGGCC TTCATGGCCT AGACTCTCTT TATACAATTC ATCAAGGTTA AACAAACAT	60
AAAATTCCTT TAAAAATAGG GTAATAAAAT AGATGAAATT TGTATCACTC AATTGGTGA	120
TACTAGTAAA AACTATAGTT CATATTTATA TACAAATAAT ACAGTCTGTA AAAACAGTCT	180
TAGAATTTAA ATAAGCTATC TAAACGTGTT AAAATTTTAA ATCAGGACCT GATTGTTTT	240
GCTTTCATT AAATGTCACA TTGAATTCTA GACCTGCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:958:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

```
CTCGAGGACC TGGTCGTGAC CAACTATAAG ATGGGGGGGC GACATTGCCA ATGGGGTACT      60
TCGGTCCTTG GTGGACGCAT CTAGCTCAGG TGTGTCAGTA CTGAGCCTGT GTGAGAAAGG      120
TGATGCCCGTG ATTATGCAAG AAACAGGGAA AATCTTCAAG AAAGAAAAAG AGATGAAGAA      180
ACGTATTGCT TTTCCACCA GCATTTTGGT AAATAACTGT GTATGTCACT TCTCCCTTTT      240
GAAGAGAGAC CAGGATTATA TTCTCAAGGA AGGTGACTTG GTAAAAATTA GGCCTCTTTG      300
GCCGAATTC                                     309
```

(2) INFORMATION FOR SEQ ID NO:959:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

```
GAATTCGGCC AAAGAGGCCT AGATTGAATT CTAGACCTGC CTCGGACTAC TGCAAGTGCT      60
TAAAGGCATT ATTCATAGA CCTTACAAC ACCCATATAA CATTATTATC TTCATTTTAC      120
AAATGAGGAT AATAATGTTA TATCTCGAG                                     149
```

(2) INFORMATION FOR SEQ ID NO:960:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

```
GAATTCGGCC AAAGAGGCCT ACACCGTAAT ACTATAATAC TATATAATCT GTTTGTTAAT      60
TTTCTGAGAA TAATAACTCA ATGGAGTAAC TCTTTAATAG GCATCTTTTC CTTATAAAAA      120
ATATTGTAGA TTGGCTCTCT GCAAGCTAAT TTCTTTTATA TGGTTAATAT TTTAGTGATC      180
ATTAAGAGCT TAGAGTTCTT TTTGTAATCA AGCTTGCTAC AGAAGCTGTG CTTTATTTAT      240
TTCATAGTAA TTTCTCTAG TGGGTCAATG TATAAACCCCT GATCATTTT GTATGTCTAT      300
TCCTTTTCTT GCGAAGTGGG CAGCTTGTTT AGCCATGGTG TTTTGGCTTC AATAGTGAGG      360
TCTCTATTTG GGAATCTCTG AATTTACAG GAATGAGTAG AACTATATTT AACAAATGAA      420
AAAATAGTAT TAGATTTTAG GGCAGCTGGC TCGAG                                     455
```

(2) INFORMATION FOR SEQ ID NO:961:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 207 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

GAATTCGGCC AAAGAGGCCT ACCCTGTCTT TATGCTCCAA TGCTTCTTTC TCCAGATATG	60
AAAGGAGATG CTCTCTATCA AATGGCCCTG TGGTGGACTT TGATGTCTGG TTCTTCTGCC	120
GGAACCCCTGC TGGCTTTTTC CTGTAGCTCC ACATTCTGT GCATTGAGGG GTTAACATTA	180
GGCTGGGAAG ATGACAAAAC TCTCGAG	207

(2) INFORMATION FOR SEQ ID NO:962:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 247 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

GAATTCGGCC AAAGAGGCCT ACTGTAGTAT TTAAATATCT GTTACAGGTT TCCAAGGTGG	60
ACTTGAACAG ATGGCCTTAT ATTACCAAAA CTTTTATATT CTAGTTGTTT TTGTACTTTT	120
TTTGATACA AGCCGAACGT TTGTGCTTCC CGTGCATGCA GTCAAAGACT CAGCACAGGT	180
TTTAGAGGAA ATAGTCAAAC ATGAAGTAGG AAGCCAGGTG AGTCTCCTTT CTCCAGTGGA	240
TCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:963:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 472 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

GAATTCGGCC AAAGAGGCCT ACAAGAACAT GAAACATCTG TGTTCTTCC TTCTCCTGGT	60
GGCAGCTCCC AGATGGGTCC TGTCCCAGGT GCAGCTGCAG GAGTCGGGCC CAGGACTGGT	120
GAAGCCTTCG GAGACCCTGT CCTCACCTG CGCTGTCTCT GGTGGCTCCA TGAATAGTCA	180
CTACTGGAGC TGGGTCCGGC AGCCCCCAGG GAAGGGACTG GAGTGGATTG GATATATCTC	240
TGACAGGGGG AGCACC AACT ACAACCCCTC CTCAGGAGT CAACTCACCA TATCACTAGA	300
AACGTCCAAG AACCAGTTCT CCCTGAATTT GTTCTCCGTG ACCGCTGCGG ACACCGCCGT	360
ATATTACTGT TCTCGTGGGA CATCCCCC CCCCTCCTAC TACTACTCCA TGGACGTCTG	420
GGGCAAGGGG ACCACGGTCA CCGTCTCCTC AGGGAGTGCA TCCACCCTCG AG	472

(2) INFORMATION FOR SEQ ID NO:964:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

GCTCGGCTCG	CTGCAACCTC	TGCCTCCCAG	GTTGAGCGA	TCTTCCTGCC	TCGGTCTCCC	60
AGGTAGCTGG	GACTACTGGC	GTGCGCGACC	ACGCCAGCT	AATTTTGT	ATTTTGTAGT	120
GAGACGGGGT	TTCACCATGT	TGGCCAGGAT	GGTCTCAATC	TCTTGACCGC	GTGATCTGCC	180
TGCCTCGGCC	TCCCAAAGTG	CTGGGATTAC	AGGCTTGAGC	CACCGCATCC	AGCCAACATT	240
TTCAAATAG	AAAATCTGAA	GCTAAATCA	CCCCTAAAGG	ACAAATAACA	GGACTATCTC	300
GAG						303

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

GAATTCGGCC	TTCATGGCCT	ACTAGATTAT	GGATTTT	ATTTCATGG	AAGTGAAGTT	60
CAAAGATGCC	AGAGTGGTAC	AGTTCGAACA	AACTGCTTGG	ATTGTCTTGA	TAGAACAAAT	120
AGTGTGCAGG	CATTCTTGG	CTTAGAGATG	CTAGCTAAAC	AGTTGGAAGC	TCTTGGTTTA	180
GCTGAAAAGC	CTCAGTTGGT	GACTCGCTTT	CAAGAAAGTTT	TTCGGTCAAT	GTGGTCCGTG	240
AATGGTGATT	CAATCAGTAA	GATATATGCA	GGAAACTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 454 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

GAATTCGGCC	TTCATGGCCT	AGACGTGATG	TGTTGAGAGA	AGAATGTTCT	AGGCAGAGGC	60
AACAGCAGAT	GCAAAGGTCT	GAAGGGGAGA	CAGACCGAGC	TAGAAAAGCA	TGGCACATCA	120
GTGATCTAAG	TTCGTGTGGT	TTCCTAAGGT	TGGAACCTAG	GGTGCAAACT	GAGGATGGGC	180
AGATGAGGGT	GAAGAGGAAG	AGCAGACCCA	GGTCACAAAG	ATCTTTTGTG	CTAAGGATTT	240
TTAAGCAGGT	AGGAGGAGAG	AGAATATGAG	CCTTGGGATT	TGAACTGCTG	TGGGTGTACA	300
GAAAAAGAGA	AACTCAACGA	GAGGTTTAGG	TTTAGGGACG	TGGTAGGCTT	TTGCAGTAAG	360
GGACAAGGAC	AGAAGGCTCA	TCTGAGGATG	GGAGGGACAC	TTTAGAGGCA	AATCCATAGG	420
ATGCAGTGGC	TGAACAGAAA	AGGTGAATCT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AGTCATTTAA	TTTAACTTAG	CAAACTCCA	ATAGTGTAA	60
TTAACAGATT	TTGGAACTG	GTTTAAAGTA	GATGTATTAT	AACATAAAAC	AAAGCTAGCC	120
ATTATCAAGT	TATTCCTTG	TTAGCTATTT	TTACAGCATG	TGCATGTTAG	GTAAGTCATCG	180
TGAAAGCAAG	AATCTTAACT	TAAATACATG	TTTTTTTGT	TTGTTTGT	TACTGCTGTG	240
CTGTATAATA	CATGATGCTG	TTAGCAGCGG	AACGTATCAG	AGACACGGCA	CCAAAGTATG	300
TTACTGTCCG	CGAAACTCG	AG				322

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATGGCCT	AGACTGCTGG	CATATCCACC	CCACCTGTGC	TGCTGCCCCC	60
GCCAATCCAT	CAGGGCAGCT	CCGACTCCTG	CAGCACCCAC	CGCCCAGGAC	GTCAGCTACT	120
CAGGTTTTCT	GGCTGCTGGG	GTTCCGCACG	AATGGGCCCT	TCTTTTGGGA	AAATGCCAGG	180
GAAGGGGAAC	GGCTGGGCTC	GGGCGCCACA	GCTTGTCCTT	CCAGCCAGCA	GGCACAGATG	240
TATGGCGCAG	GAGGGACAAC	TGGCCCCGTG	GGCCAGCCCC	AGAGAGACGG	GCCCTTTCTT	300
TGGGACCCCTG	GCCTCAGAGG	CCTGCGTGTC	ACAGCTCAGG	GTCCTGGCTGG	GCAGGGGGCAA	360
AACCTGCCCTT	ATTTGCCAGA	TGTCCAGAA	GTACACAGGA	GCAGACGCAC	CACTTCGATG	420
GCTATTTTAG	GAGGCTGGTG	ACAAGCAAGG	CATGGTGGA	GGAAGCCAGG	CCCTCGAG	478

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

CTCGAGGTCC	CTGTCCTGCT	CAGTTTCTCT	TCAATGTGGA	AGTCCTGGGA	GGTCAGTCTC	60
ATGAGAATAA	GGTGCTGTAC	TTTCACAGCC	TTCTCAGACT	TTTCTGAGGA	TGGCCTTACA	120
CTTGCCAGCT	AGTGGAGTGA	GCAGAACTCC	TCCTGGTTTC	TGTGGCTGTT	CTCAGAATGC	180
CCTAGTTTAC	TTTCCAGTAA	TACTTTTTTG	GGAACATTTT	GTGTTTCTCA	TTTTCTCAGG	240
TCCCCCAGGC	ACACCATCTT	TCCTCTGCTT	CCTCTCACAC	AGGTGCTGAT	ACTGTGTAGG	300
TTTGGGGCTG	TTGTTCTGGC	CCACTCCCTG	ATATTTTCTG	GGTTTGTCTC	CTAGTTTCTT	360
TAAAAGTATC	ATCTACATGG	TTTTGGTTTC	ACTATCTATT	CTGTCTTTAT	TTGAACACTA	420
GGGGAAATTC	ATTATGCCAA	TCTCACACAT	TGTGTGATTG	CATTAGGCCA	TGAAGGCCGA	480
ATTC						484

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 540 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

```
GAATTCGGCC AAAGAGGCCT AGGCAAAATG AAAATACTTG TGGCATTCTT GGTGGTGCTG      60
ACCATCTTTG GGATACAATC TCATGGATAC GAGGTTTTTA ACATCATCAG CCCAAGCAAC      120
AATGGTGGCA ATGTTCAGGA GACAGTGACA ATTGATAATG AAAAAAATAC CGCCATCATT      180
AACATCCATG CAGGATCATG CTCTTCTACC ACAATTTTGT ACTATAAACA TGGCTACATT      240
GCATCCAGGG TGCTCTCCCG AAGAGCCTGC TTTATCCTGA AGATGGACCA TCAGAACATC      300
CCTCCTCTGA ACAATCTCCA ATGGTACATC TATGAGAAAC AGGCTCTGGA CAACATGTTC      360
TCCAGCAAAT ACACCTGGGT CAAGTACAAC CCTCTGGAGT CTCTGATCAA AGACGTGGAT      420
TGGTTCCTGC TTGGGTCACC CATTGAGAAA CTCTGCAAAAC ATATCCCTTT GTATAAGGGG      480
GAAGTGGTTG AAAACACACA TAATGTCGGT GCTGGAGGCT GTCAAAGGC TGCACCTCGAG      540
```

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 289 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

```
GAATTCGGCC TTCATGGCCT AGCCAGTCTC AGCACTTAAA CAACCAGGTG TTGAAGGACT      60
ATGTTCCAAA GAACAGAAGA GAGTATGGTT TGCAGATGGT ATATTGCCCC ATGGTGAAGT      120
TGCAGATACA ACAAATTAT CATCTGGAAG TAAAAGATGT TCTGAAGACT TTAGTCCTCT      180
CTCACCTGAT GTGCCTATGG TAAGGAATTC AAAGAATACT TAATTGACTA AACAAAATTT      240
TATTTCTAG ATAATTCCTG GTGTGATTAT TAGAGTGCTT TTTCTCGAG      289
```

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 418 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

```
GAATTCGGCC TTCATGGCCT AGAGCTTGGG AGGTTGAGGC TGCACTGAGC TATGAGCTGC      60
ACCACTGTAC TCCAGCCTGG GTGACAGGGC AAGACTCTGT CTCAAAAAC AAAAACRACA      120
ACAAAACTT TATTCCTAAA AAGTGCTGAC CCAGAGATAA GAAGCAAGCA CATGGTTGGT      180
AAAATGACAT CAGTGAGCTT GCTTTATGCA GGGTTGCCCC AAACCTTCAA TTTGTAAAC      240
TCAAAATATC TGGAAAGCTT GGTGAGGCGA GCGGGGACTG TAACTCAGCA CTCACCGCAG      300
GGTGAGACCC TTAGGGCAGC GGGTGCTACA CTGAACAAAG CGGTGAACAG CCCCTCGTG      360
AGAGGGGGTT CTTGGCAGAT GACGCCAGCA GCTGACAAAC AGGCAAGTGC AACTCGAG      418
```

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 276 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

GAATTCGGCC TTCATGGCCT AGATTGTAA AAGATTTTCC TAGATTTACT GTGTTCTGGA	60
TCTAGCTTGA ACGTGAATGT TTGTATAGTA CGTTTTCTTA ATATTTTSTA GTATTCATAG	120
TATATAATCA TACTAAACTT GAGAACTGG AAGAATCAAG TCTTCCTCAG TTCTGTTTAG	180
ACTTTCTAGT TTTTCTTAAG GATACTTCCA TATCTTCTGT AAGCTACACA GTGAGCTTCA	240
TTTTGCACA GTTATAATAC ACTCTCGAAT CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 379 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

GAATTCGGCC TTCATGGCCT AGGGTTCGAT GATAAGCACA GGCGGCAGCT GGATTGCAAG	60
TGGAGTGGTA ATGGCCAGAA CAGCCTCTTT CTGTTTTCGA TTTAGTCGAG GATCCAACCTG	120
TTTCATCCCAT TGTCTGTTAG GACTCCATGG TATGGTGGGA GTCATACTGA TGTCTGGAAA	180
CAAAACCCCA TTGTCCTTGA TCCTGTCTAG TGCATAGTGC ATTTCACAGA GGGGTAATCG	240
ATTTAATTGA AACTGAAGTT CAACCTGTGT GTACACAGTCA GGCCGAAGAT TAAGTTCTTC	300
ACAGCATTCC CTAGATAGCC TTAATAATAT ATATTCCTTT GTTTTCTCTT CAATAGTAGC	360
TTCTAGACC TGCTCGAG	379

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 417 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

GAATTCGGCC TTCATGGCCT AAGAGAAAGA GAGTGAGAGA GAGAGAGAAA GAGAGAGAGA	60
GATGCTGTTG AATCAGAAAC AGATCAACAG CCCAAGATT TTCCTGTCCC TGGAGTGCCA	120
GCCCCAGGAA GCTCCAGGGC TGAGTGGTCA GGAGCCAGTT TCTCCAGCCC CTCCTCCCCA	180
CAACCCCTAG TGGGGAGGGG CAGCTGTCCA TTGCCCCAAA GTATTAATGC AACTGAAGCT	240
GTGATATTTC CAACGACTGT AGGAGGAAAA ATTAAGGGGA GAGAGGAAAA CAAAACCAAC	300
CAACCCCTAA AATCATTTTC TTATTGTACA TAACGACCTC ATTCTCCTGT ATATGCGGAA	360
GATATAACCT TATATTGGT AAGTGTTTCT TGTGCTATTT TATCACGCGA CCTCGAG	417

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 154 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

GAATTCGGCC TTCATGGCCT ACACAGAAAA ATTTCAACAA TAAAAGTTCT TAATTATGGG	60
AAATAGTTAC ATGTGTGTTA TATCATTAT GGCTCATTTT GTATTTTAT TTTAAAGTAT	120
TAAAATCCCA ACAGTAACAG CAATACAACT CGAG	154

(2) INFORMATION FOR SEQ ID NO:977:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 252 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

GAATTCGGCC TTCATGGCCT AAATTGTTCT TTGCTCAAAT AAAGTGTAA ATTTATCTTG	60
GCAGACTCTA TTTTGATCCC CAAATTTGAT TTAGATTGG GGCCATTAA TTCACTATT	120
TAATAATAAC CCTACTGGAT GAGAATAAGT GTTCTCAAT TTCTGGTGAT ATGGTTTGGC	180
TGTGTCCCA CCCAGAATCT CATCTGAAT TATATCCCC ATAATCCCCA CGTGTCAACG	240
GCAGGACTCG AG	252

(2) INFORMATION FOR SEQ ID NO:978:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

GAATTCGGCC TTCATAGCCT AGTTTAGTTC TCAGAAITCT TCATATATT TGGCAGCAGT	60
TTTTCCATCA GATTATTTTG TAAATATTTT CTCCAGTCT GTGACTTGCT TTTCCATT	120
TCTTAACAGT GTCTTTCACA CAACAGAAGT TTTTAATTT AATGAGGCTC AACTTAATTT	180
TTTTTTCATT AGTAGATTGT GCTTTTGTT TTGTATCTAA GAAGCCATCA TTGAACCCAG	240
GATCGCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:979:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 534 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

GAATTCGGCC	TTCATGGCCT	AGAAGGCTTC	TGAATAATTT	CTCAAACTA	NCTTTCCATT	60
TNAGTACACG	ATTGATAAAA	CATAGCACAT	TAGATAGGTA	TTTAGCAATT	TCTTCTACCA	120
ACTACACTTT	GCCCTCACTA	AGGGTTAGAG	TATGATTGGA	AACAATTTCT	ACATATAAAG	180
CATCTTTAAA	TAAGTTTTGT	GTTCACTGAA	CTGAGACTTC	TTTCACTTAT	GTACCTATGG	240
AAGTTAATCT	GAGCATACAC	ATATATACAT	ACTTGCATAC	ATATGTGTAC	ATATGTTTTT	300
TAAGTAAGTN	ACTTTTACCA	TTAGAATAAA	CCTAGACACT	ACAGGGACAA	CTCTGGGGAA	360
CAGGGCGGTC	TGCCTTAACA	ACCCTTCTCT	AGGTTGAGGA	AGGCAGGTAT	AGTTCACCTGA	420
AGGATGTGAT	GAGGCTGTAG	TAAGTCTTCT	CATCATCTGT	TAATCCTGCG	TGCGCTGGTC	480
TCACCACCAC	AGCTACGTGC	ACATCTGCTT	CCTCAGCAGC	ACTGGCCTCT	CGAG	534

(2) INFORMATION FOR SEQ ID NO:980:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

GCTCGAGTGT	CGTGCTATCT	CTAAATTGTG	ATCACTAAGA	ACCGCTGCGG	AAACAGTAAC	60
TGTTTCTTTT	ATTTTGGACA	TTTTAGTTTG	TAATTTATCC	AAATCTTTCT	TCTTTTGATA	120
AGTCTCCATT	CTCTTTACTT	CACGGGTATT	TTCAAATTC	TTAATCATTT	TATCACAGTG	180
CCACTTGTTA	GACCCTAATG	AACGATGTCA	CCCTCTTATC	AAA		223

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

GAATTCGGCC	TTCATGGCCT	AATTACTTGA	CCCGTAATAG	GGTTGTGGCC	GTTTTCTGAT	60
GCCTAAGTAT	TATACAGAGC	CCACAATGGC	CAGTTTACTA	CCAGAAAGGG	CTTCAGTAAG	120
ATATTCTTGG	ACTTGATACT	TTCTTCAGAT	CCTCTTTGTG	CCAAGATAAT	TTATCCAGTC	180
ATTGGGAATA	GTAAGTTTCT	GTGTAACCCA	TCTCAATTAT	AGAAGCAAGT	TCAGCTTTAT	240
GTATTTGTAT	GGGGAGTTGA	AGATTCAGAT	AGAGGTATTA	AGATGTGTGG	CATTTACTTA	300
AACCATCACA	TTTTTTTCTT	TCTACGCCCC	CTTGCCTGTA	AAACACCTGG	GAAGTTCCAC	360
TGGTGTCAATC	CATCCTGATG	CTTCAGACCA	CCCTCCCTTC	TTACAGAGCC	GTGTCACTTT	420
GCCTGTGGGT	GGGGGCTAGC	CAGCCACCAC	CCTCTTTTCT	GTGCTGCCAG	CCAATCTCGA	480
G						481

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:


```

TCCGTGTCCC CTCCTCCCTC TGCCCCCAGT GTTCTTCTG ATTTTTTTTT CCCCTTTCCC      60
TCCCTCCCTC TCCGCATTCT TCCCTTGGTT CAGCACAGGT AAAACGGTTC CCCTCCCTCC      120
CTGCCTTCAT GGATCACCAG CTCACGTCAT GTTGCCTTCT CTTTCTTTTG TGTGTGTGTT      180
TATTTAAGTT ATTTTCTTTC CTCCTCTCCC TTTTCTTTT GGCCCTCCCT CCCTCCCTCT      240
TCTGCCATGT AACTGGAGGA TGTGCTATGA GTTTGCAAAC AGCCGGACTC GAG              293

```

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

```

GGTGAGGATG GTGGCTGTGG TTGTGTTGGT GGCTGTGATG GTGAAGGTGG CTGTGGTGGG      60
GATGGTGACT CTGATGCTAA TGTGTTGTTT GTTGATGGAG GCAGCTGTGG CAAGGATGGT      120
GACCTTGGTG GAGAAGGTGG CCATGTTGGG GCTAGTGGCT GTGGTTGTTG TGATGGCCAT      180
GGTGAGGATG GTGTTAAGG TGGCTGTGAT GAAGATGGTG ACTGGGGTAG AAATGGTGAC      240
TGTGATGTA ATGTTGGCTG TGGTGATGAA GGGTAGTTAT GGTGAGGATG ATGACTATGG      300
TGGTGAAGGG GCCATAGTGG CAACGGCACT CGAG              334

```

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 631 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

```

GAATTCGGCC TTCATGGCCT AGGGAAAGAG TAGGGGTGGA GGGGTAGGAG GATTACTCT      60
TCCAGCGAGA GCTACGCGCA TCCCATCCTC CCCCTCCCCC CTACCCGGGC TCCGGCNTGG      120
AGGCGGGGCG TGGCCGGCCT GCTTTGGGAG GGGAGGGGCT TCCCTTACAG TGCTGGGCTC      180
TGCCAGGACG GCTGTGGGGT CGCCTTACCT CGGGGTATCC ACTCTGCAGT CGACCAAGTTC      240
CCGCCAGGAG CAAAGGGTAG GAAGGAGAGC AGGATCTGCT GTAGGAACGC AGCTACCGCG      300
CCACTATCAC GAAGAAACAG CAGGCTCGGG GCACGAGACG AACTGGAGAC CGCGTGCCT      360
AGCTGGGTAA CCTGGGAAGC AGAGGGTAAT AAGTGGCGCC TTAAGATAAC CCTGTAGCAG      420
CAGCAGTGGC GGCCAAAGGA GGCTGCTCAG GGAACAAGCG GCTGTAGTAG TCTGTGGGGC      480
GACTGGAGTG ACCGAAGCCA AGGCAGTTTA GTGCCTCTCG TGTCTTATT TTTTAACCTC      540
TGACTATGCA ATTCTGAAAC CTCCCCATT CGGGGGACCA GACAGCCTGA TAGACACCTT      600
CCACTCTCCT TCCTCCGCGC GTGGTCTCGA G              631

```

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

GAATTCGGCC	AAAGAGGCCT	ACTGCCTCGG	TTTCTACCTT	TGCCAAATGA	GTTGATAGAT	60
TATCGCTTTT	TTTCCAGCTG	TCATACTCTA	GGAGTCTGAA	TTGTAAAATC	AAAGAAGCAT	120
TTCCAGAAA	AGTTTTTGTG	AAAAATTGTA	TTTACATAAC	CTCAGAAATG	TGTATTGCTT	180
TAAAAATTAT	AAAGTTCATG	GAGCATACCA	AGCAGCCTGT	ATACCATTTC	TAAACCAACT	240
ACTCCCCTGC	AAGATAGATC	TCTTTTTTAT	AGACAGAAAA	TAAATTCAAA	GAGGTTTGTT	300
ACTTGCCCAA	GGCCACCACT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

GAATTCGGCT	TTCATGGCCT	AAAATGTTTT	TCAATTAAAG	ACTTAAATAT	TACACTTTTA	60
AAACTTTTTA	TTATGGAAAT	CTAAAAAAA	TTCAACCAAT	GAGAGAGAAC	ATTACAATGA	120
ACCACCACAT	ACCCATCACC	CATTTTCAAC	AATTATCAAC	ACATGGCCTA	TCTTGTTCCT	180
TCCATACCTT	CAGACACCCT	CCGTCCACAA	ACTGGGTTAT	TCTGAAGCAA	GCCTTCGAG	239

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 695 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

AAAAGTTCAG	GGACTTTGCA	CCCTGTGGGG	TACTCAGATG	TCCAGCCGCA	CTCTCTACAT	60
TAATAGTAGG	CAACTGGTGT	CCCTGCAGTG	GGGCCACCAG	GAAGTTCGGG	CCAACTTTAA	120
CTTTGCTAGT	GATGTGTNGG	ATCACTGGGC	TGACATGGAG	AAGCTGGCAA	GNGACTCCNA	180
AGCCCACCCC	TGTGGTGGGT	GAATGGGAAA	GGGAAAGAAT	TAATGTGGAA	TTTCAGAGAA	240
CTGAGTGAAG	ACAGCCAGCA	NGCAGCCAAC	TTCTCTCTCG	GAGCCTGTGG	CTTGACGCGT	300
GGGGATCGTG	TGGCAGTGAT	GCTGCCCNCA	ANGCCTGAGT	GGTGGCTGGN	GATCCTGGGC	360
TGCATTGAG	CAGGTCTCAT	CTTTATGCCT	GGAACCATCC	AGATGAAATC	CACAGACATA	420
CTGTATAGGT	TGCAGATGTC	TAAGGCCAAG	GCTATTGTTG	CTGGGGATGA	AGTCATCCAA	480
GAAGTGGACA	CAGTGGCATC	TGAATGTCCT	TCTCTGAGAA	TTAAGCTACT	GGTGTCTGAG	540
AAAAGCTGCG	ATGGGTGGCT	GAACCTTCAAG	AAACTACTAA	ATGAGGCATC	CACCACTCAT	600
CACGTGTGTG	AGACTGGAAG	CCAGGAAGCA	TCTGCCATCT	ACTTCACTAG	TGGGACCAGT	660
GGTCTTCCCA	AGATGGCAGA	ACATTCCTAC	TCGAG			695

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

```

GAATTCGGCC TTCATGGCCT ACTCAGAACA ATCACTGCAT ATCCCATCTT AAAGGCAAAA      60
CCCAAACCAG AAAAACCACA CTCAGGTCTT GGTGACCCAA CACTACAGTC ACTGTATTG      120
AGACCCCTTT TTCTTGAAAA AGGGACTTCA CTTTTTTGAG CAGCATTCTA TGGTCTCTTC      180
CACACAGCAA TTGACGCATC TCACGGCACT GCTCTCTGCT GGGCAGAGAG CAAACACAGA      240
CAGCCACCAT CCCCATATTC GTAGTAAGAG AAATCCAGA AACGCAGCCA CCGTCCCCCT      300
AGACCTGCCT CGAG                                     314

```

(2) INFORMATION FOR SEQ ID NO:989:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 687 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

```

GAATTCGGCC AAAGAGGCCT AGGAGCTCCC CCATGGATCA TGGCGTTAAT GTTACAGGA      60
CATTTACTAT TCTTAGCATT ATTGATGTTT GCTTCTCTA CTTTGTAGGA ATCTGTGAGC      120
AATTATTCCG AATGGGCAGT TTTCACAGAT GATATAGATC AGTTTAAAC ACAGAAAGTG      180
CAAGATTTC AACCACCAAA AAAGCTGAAG AAAAGTATGC TTCATCCAAG TTTATATTTT      240
GATGCTGGAG AAATCCAAGC AATGAGACAA AAGTCTCGTG CAAGCCATTG GCATCTTTTT      300
AGAGCTATCA GAAGTGCAGT GACAGTTATG CTGTCCAACC CAACATACTA CCTACCTCCA      360
CCAAAGCATG CTGATTTTGC TGCCAAGTGG AATGAAATTT ATGGTAACAA TCTGCCTCCT      420
TTAGCATTGT ACTGTTTGTG ATGCCCAGAA GACAAAGTTG CCTTTGAATT TGTCTTGGAA      480
TATATGGACA GGATGGTTGG CTACAAGAC TGGCTAGTAG AGAATGCACC AGGAGATGAG      540
GTTCCAATTG GCCATTCTTT AACAGGTTTT GCCACTGCCT TTGACTTTTT ATATAACTTA      600
TTAGATAATC ATCGAAGACA AAAATACCTG GAAAAAATAT GGGTTATTAC TGAGGAAATG      660
TACGAGTATT CCATGGTCCG TCTCGAG                                     687

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(2) INFORMATION FOR SEQ ID NO:990:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 677 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

```

GAATTCGGCC AAAGAAGGCC TAGAGCCCTT CTGTCCCTTC TACCATGTGT GGATGCAGTG      60
AGAAGGCACC GTATCTCTGA AGCAGAGAGC CCGCCCTGGA CACTGGATCT GCTGGCACCT      120
TGATCTTGA CTTCCAGCC TCTAGAAGTG TGAGAAATAA TTTTGTGTG TTTACAAATT      180
ACCCAGGCTA AGGTGTTTCA TTGTAACCTG AATGGACCAA GCTGGTGTGA CCCTGTGGGA      240
AAACTGGCAG TATCTACCAA AAGCCGAACA TACGTATAAA CTGATCCAGC AGTTCCACTC      300
CTGGGTATGT ACACCACAGA AAGCTATGTC CACCGAGACA TTGGCAAGAA TGTCTCTAAC      360
CACACGCTGA CTGTAGCCCC AAACCTGAAA CAACCCAAAT GTCCATCCAC CAACCCAAAT      420
GTCCATCCAC AGTTGAAGCT ACAGTGAAAGT CACAGGGTCG AATACTACTG CACAGCAACG      480
AATATGAATG AAAATATCGC TATGCACAGC AACATGGATA AATTTACAGC ACATGAGGTC      540
AAGCAAAAGA GGTGAGATG CTCATCATCA AGAGAGAATT CATTGTATGA TTCTCTTCCT      600
ACAAAAAGTA CAGAAATAAG CAAAACCTGAT CCATGGTGTT AGAAGCCAGG GGAACAGTTA      660

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ACAAGGGAGC ACTCGAG

677

(2) INFORMATION FOR SEQ ID NO:991:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 445 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

GAATTCGGCC	AAAGAGGCCT	AAGAAGCTGC	TTCCTCCTGG	GAACAACCGC	CTCCCCTCC	60
TAGCAGGTTG	CTACTGCCCC	GAACCCGCGC	TGCAGGGAAC	AGCGGGGCAA	ACAAAACCAA	120
TAGAGCCATG	GCGACTCCCT	CTGCTGCCTT	CGAGGCCCTT	ATGAATGGTG	TGACAAGCTG	180
GGATGTACCC	GAAGATGCTG	TTCCATGTGA	ACTGCTTCTT	ATTGGAGAGG	CTTCATTTC	240
TGTGATGGTG	AATGACATGG	GCCAGGTCCT	CATTGCTGCC	TCCTCCTATG	GCCGTGGCCG	300
CCTGGTGCTC	GTGTCCCATG	AGGACTACTT	GGTGAAGGCC	CAGCTCACGC	CCTTCTCCT	360
GAACGCAGTG	GGGTGGCTTT	GCTCTTCCCC	TGGGGCTCCC	ATTGGTGATC	ACCCATCCCT	420
GGCACCTTTG	GCCAAAATCC	TCGAG				445

(2) INFORMATION FOR SEQ ID NO:992:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 392 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

GAATTCGGCC	TTCATGGCCT	ACTGTGATT	AAAATCTGC	TGTGTGGCTT	GGGTTGTTT	60
TGTTGGTTCC	AAACCCTGAA	TCTTTTGGGG	TCTTCAATTT	GTGGGCATGT	CAGTGGAAAT	120
TCTAAGCTTT	GTTTAATGGT	GTGTGTGTGT	CTGTCTGTCT	CTGTGTGAGT	GTGTTTAGAA	180
ATTGGCTTCT	CTGGGTTTCT	CGCTCGTCTT	CTGGAAGGTG	GGGTTATAGA	CATGCTGGTG	240
AATTCTGAAT	GTTTATATAA	TTAGACTATT	AACGGAGTTA	AATTGAAGAA	ACCTTCTGTC	300
ATAAGACCTT	CCAGGAATTC	CATTCCAAAT	GAGGAAATGC	ATAAAGACTT	GTCCACTTGG	360
CAACATTGG	GTGTTTGGGA	GGTGGACTCG	AG			392

(2) INFORMATION FOR SEQ ID NO:993:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

GAATTCGGCC	TTCATGGCCT	AGGCGGCTCC	CTTGGTCCTG	GTGCTGGTGG	TGGCTGTGAC	60
AGTGCGGGCG	GCCTTGTTCC	GCTCCAGTCT	GGCCGAGTTC	ATTTCCGAGC	GGGTGGAGGT	120
GGTGTCCTCA	CTGAGCTCTT	GGAAGAGAGT	GGTTGAAGGC	CTTCACTGT	TGGACTTGGG	180
AGTATCTCCG	TATTCTGGAG	CAGTATTTCA	TGAAACTCCA	TTAATAATAT	ACCTCTTTCA	240

TTTCCTAATT GACTATGCTG AATTGGTGT TATGATAACT GATGCACTCA CTGCTATTGC 300
 CCTGTATTTT GCAATCCAGG ACTTCAATAA AGTTGTGTTT AAAAAGCAGA AACCTCGAG 359

(2) INFORMATION FOR SEQ ID NO:994:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

GAATTCGGCC AAAGAGGCCT AGACTGTCAG CTGTGAGTGG CCAGTACAAC AAATGCTTTG 60
 GCTTTCAGTT GTCATTCTGA TGTCTTGCAA CATATCATCG TGTTCGATTG TCGAG 115

(2) INFORMATION FOR SEQ ID NO:995:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 633 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

GAATTCGGCC AAAGAGGCCT AGTGGAGACA AAAGCATGTG ATCCCAATTT GCTGGGATAT 60
 CCTCTCCTGC ATTTCAAACA CCTTCACTCA GTGTCAGCCA CAGCGGCCAC CACATAGCAG 120
 CTGGCCCCGC ACCTTCTCTG GAACAGTCTG GAGATGCAAG GTCAGGGTGG AAGGCCTGGT 180
 TCACCCTTGA AAGAAAGGAT GGCTAGGGGT AAACAAGACG AGCAACTCCC TGGAAATGCAG 240
 GGAGCCAAGA AGGGCAGCCG AGGATAAGGC TCTGCCTCCC CAACGGCGAG GGTTTCCTTT 300
 CCTTCTGGTC ATTANAAC TG CACAGCCCCC GGGGAGATGT TGAACATGGC AGGGTCGAAT 360
 CGCTGGCCTC GGAAGGGAGA ACTTCAGCAT CCCACCCTTC TTCAGCATCT CATGGACTTT 420
 CAGCTCATGG CTCTGTGGCT TGCCCTGCAG CTTCTGGTGG TAGTCAAAGG TAAGCCTGTC 480
 CAACACCGCC TGTTCCTCCT CATCCACGGT GGCCATGGAG CGCTCCTTGT TGATCTTGTC 540
 AATGTCGATG GGCTCTTCTC CCTCCAGGAT GGCCTTCCAC CAATACTCGC CCACCTTGCT 600
 CAGGTTTACC AAAACGCACT TCCCGGGCTC GAG 633

(2) INFORMATION FOR SEQ ID NO:996:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

GAATTCGGCC AAAGAGGCCT AGTTGATTCT CAGTTCATGG TGGAGTCATT CAAGTTTATT 60
 TCTGGCATCT TGGCAGCCCT GAGTGCCATG ATCTCTCTAG AAATTCCGCA AGTCAACATC 120
 ATGACAAAAA TGGATCTGCT GAGTAAAAA GCAAAAAAGG AAATTGAGAA ATTTTATAGAT 180
 CCAGACATGT ATTCTTTATT AGAAGATTCT ACAAGTGAAT TAAGAAGCAA AAAATTCAAG 240
 AAAGTACTA AAGCTATATG TGGACTGATT GATGACTACA GCATGGTTCG ATTTTACCT 300

TACGATCAGT CAGATGAAGA AAGCATGAAC ATTGTATTGC AGCATATTGA TTTTGCCATT	360
CAATATGGAG AAGACCTAGA ATTTAAAGAA CCAAAGGAAC GTGAAGATGA GTCTTCCTCT	420
ATGTTTGACG AATATTTTCA AGAATGCCAG GATGTACTCG AG	462

(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

GAATTCGGCC AAAGAGGCCT AGCTGGTAAC ACATGTGAAC TCAGGTAAAG TCATCGAGCA	60
TTTTACTGAC TCTATTCCTC AATAAAGTAC TGGGAAAAAA CTCATAAGAA TGACAAAAAC	120
AACATACTCA GGTATGCGAG CAGAAGCCTC TGACACAGCT TGTCTTCGGG GCTTAACTAA	180
ATGATCTATT TTAATGAGGG AATCCGTGGA AAGGCATGCG TTTTCAGGCT CATTTTCTGC	240
TTCGATGCTT TGTCCAGAGA GTTGAATCT CAACGTGTGT TTCATGTGAG GCTCCCTAAG	300
AGGGTGACAT TCAACATCCC AAAACTGGGC ATAATCCCC CTACCTCTGG GCAAAAATGT	360
GATGGAGACT TTTTGATCC CATGGCTTTC CAGCAGACCA GAAATAGGAG AACATCTGAA	420
TGCTGCATAG GTAGCTCTAA AAACATCTCC ACTTTCATCA ACTCCCTTGA CATAAGGTGG	480
CACCACAGAC GTGAAATGGC ATCTGTCATC TTTAGCGCCA CCTTATGTCA AGGGAGTTGA	540
TTCTCGAG	548

(2) INFORMATION FOR SEQ ID NO:998:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

GAATTCGGCC AAAGAGGCCT AGTTTCCCTT TCTGTATTTT ACTACTAAAT TAGAAAGCAC	60
TGGTTATGTA ATAAGTTACT ACATTGCTTT GGTGAGTAA AAACAAGAGT ATATATTTTT	120
CTGTGTTCTT ATTTNCTAAA CCCTTAACTC CTGCTGAGGT CATAACAACC TCAGTCTAAG	180
CTCTGTGTCC ATCATACTGT TAACTTAAAC AAATGGGTGG TGGGGGTGGG AAGGGTAATA	240
CAGTCCTGCC ATTGCCTACC AGTAGGAGAG TCCAAACAGA ACACTCTTTT GAGTAGCAAT	300
TATTTAATTT GCCCAGTCAA GGCACCGTGT TTATATACTA TTTACATTG AATTGATTA	360
TGCCCTACAG ACCTGGCTGG TCAAGGATTG GATATACACA TATTGGCTTG GGATTCGAGC	420
TTTCTTTTTT ATTTAAATAA AAATTATAT ATATATTATA TATATACATA TATACATAGC	480
TATATCTGTA TATATATTGG GTATGTTTTA AGGATTTTTT CGCATGAGCG CAGCTGTTGC	540
GATAAATTGA CCGATTGGGA GGTATTCTCG AG	572

(2) INFORMATION FOR SEQ ID NO:999:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

```

GAATTCGGCC AAAGAGGCCT AGAGGGGAGC ACGTCTTTTC CTTGAGTGTA ATTCACTAAT      60
GACTGTGGTT CCAAGGAGGT GCGACCTTTA AAGGGAATTG GCCCTTCTTT GAAGGCAGGT      120
GAGAATCTAG TCTCAGTGAC AACCCAGCCT GATTTGGAAG GGGGGAGTCA TAAGGGTTTT      180
CGCCACGAC ACCAGGGTTG CAGCCTGCGC AAGACCTTCC ATAGCTATTT CTGCCGGCTT      240
GCTTCCTTCC CTTCCAGGCC ACGATGAGGC AGCTGAGGGT TGCCACGGAA ACCGGCTCTG      300
TCCTCCCACT GGAGGCTGCC AGCTCTGATT TCCTGCAGAG TTAAGAAGGA GGCGGCAGTG      360
GGGGTCACCC AGGCGTGAAG ATGGGTTTCC CTGGGGATAT CCTGCCTCCT GCCAATCACA      420
GCGTCTCTCT GGAATCCTG GGGGTGCC TGAGGCTGAGG CCCAGGGAAG CCCCAGAAC      480
CCAGTGCTGC TCTGAGAAGA GACTAGCCTC TGGGACATTC AGAGGTCTGG GGTCTTTTA      540
TCTCCCTCCA GCTAAAGCTA GAGGGACCTC ATTATGTGTC TTACAAGATG TACCTAAAC      600
CGTCGATTGA ATTCTAGACC CGCCTCGAG                                         629

```

(2) INFORMATION FOR SEQ ID NO:1000:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 568 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

```

GAATTCGGCC AAAGAGGCCT ACCTGTATGC TATTAACACT CACCACAGCA GAGAGCTGAG      60
GATTGTGGTT GCAATTCGGA ATAACTGCT TCTGATCACA AGAAAACACA ACAAGCCAAG      120
CGGGGTCACC AGCACCTCAT TGTATCTCC CTGTCTGAG TCACCTGTTG AAGAATTCCA      180
GTACATCAGG GAGATCTGTC TGTCTGACTC TCCCATGGTG ANGACCTTAG TGGATGGGCC      240
AGCTGAAGAG AGTGACAATC TCATCTGTGT GGCTTATCGA CACCAATTTG ATGTGGTGAA      300
TGAGAGCACA GGAGAAGCCT TCAGGCTGCA CCACGTGGAG GCCAACAGGG TTAATTTTGT      360
TGCAGCTATT GATGTGTACG AAGATGGAGA AGCTGGTTTG CTGTTGTGTT ACAACTACAG      420
TTGCATCTAT AAAAAGGTTT GCCCCTTTAA TGGTGGCTCT TTTTGGTTTC AACCTTCTGC      480
GTCAGATTTC CAGTTCTGTT GGAACCAGGC TCCCTATGCA ATTGTCTGTG CTTCCCGTA      540
TCTCCTGGCC TTCACCACCG AACTCGAG                                         568

```

(2) INFORMATION FOR SEQ ID NO:1001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 543 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

```

GAATTCGGCC AAAGAGGCCT AGTAATACTT AAAGTGCAAT TGTTCCAAGG CTTTGTGTTT      60
CATCATCACA AATATTATAA AGAAAGAGCT ATGTTTAGGG TGAAGAAGAT ATGGCACAAG      120
TAATATGTAA AGAACTTATG ACTTTCGCAT CCTTAGCAA ACAGTAAGCT GCCTGTACAG      180
CTGCACACAG ACGGACTTTA CACAACAAAC TCTGGAAGTT CATCATGAGT GAGATCCAGA      240
GAAAAGTATT TGCTGGTTCT TTTGACTGGA AAAGCATCTT GGATGTTGAT GCACTGCTGG      300
GCCAAGCAAC TGTTGCAATA GAGGCCTTCC TCATCCAGTT CATGGCCACA TCCAAAGGTG      360
TAACTCTGAG CAGTGTCTCG ACACAGACCT GCAATGCGCA GGAAGTCTTT CTGGTAAAGT      420
CTGATGTGAT CGAGGCTCAA GCTGTGTCGA TCAGTGGAGG TCTTTGGTTT CCGACATATA      480
GTCTGTGGA GAGAATCAGT ACTCTGGCCA CGAAGCTTAA CAACTGTTTC TGAAGAGCTC      540
GAG                                         543

```

(2) INFORMATION FOR SEQ ID NO:1002:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```

GAATTCGGCC AAAGAGGCCT AATTCACCTT ACGAATTAAC ACTGTGTACA TGGCACCTTT      60
GGGCCCATCT TGCCTTGAAA GTCCTGTGTT GATGGAACAG TGGCATT TTCCTTTTC      120
TCAGGACTGC AAACAGACCT AATATTTGGC CTTGCCCTTG CCTGGGAAGC TGCTGCTGAG      180
TCTTGTCTCA GCCGGGCTGT GCATTCCGAG CGGCTGCCCT GCCCTGCGCT CAGCAGCTGG      240
AATCAATCTG CCCACCTCCT TAAGAAGCCA CTTATCAGC GGTCAACCGG CAGCTGCTCG      300
CCTCCAGGG CTGCCGGGCT AGGGCTTTAT CGCATTTTTC AAAATTTCAGA TTTCTGTGTC      360
TGGGCTATGC CCCTCGAACA GTAACAGCAC CGCTTTCAG CAGGGAGGAG ATTTCACCAG      420
GATATGGAGG GGACAGGAGA AAAGCCCTCC TTCCAGAGT CCACTGTCAT TCAGGATTTG      480
CTCTCAAAGA GGCAAGAAAT CTCTAAGAAT GAAAGGAGGT GTTTTGTGTT TGTGTTGTT      540
TTTTGTATGT ACTGGGAGGA AATGGCTAAT CTTGGGTATG CACACGCTCG AG      592

```

(2) INFORMATION FOR SEQ ID NO:1003:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAATTCGGCC AAAGAGGCCT AGGCTCCGTC TGTGGGGGG CGAACACGCC GCGGTCCTCG      60
TCGTGTGAAG TAAGAACTCT GCTAGAGAGG AAATGGCTGC TTCATCATCA TCCTCCTCAG      120
CTGGTGGGGT CAGTGGAAGT TCTGTCACTG GATCTGGTTT CAGTGTCTCA GACCTTGCCC      180
CACCACGGAA AGCCCTTTTC ACCTACCCCA AAGGAGCTGG AGAGATGTTA GAAGATGGCT      240
CTGAGAGATC NTCTGCGAAT CTGTTTITAG CTATCAAGTG GCATCCACGC TTAACAGGT      300
GAAACATGAT CAGCAAGTTG CTCGGATGGA AAAACTAGCT GGTITGGTAG AAGAGCTGGA      360
GGCTGACGAG TGGCGGTTTA AGCCCATCGA GCAGCTGCTG GGATTCACCC CCTCTTCAGG      420
TTGATACTGC CTGGATGGTC ACCTCTGGTG CGCAGCAAGT GCAAAGCCAG TGGGGGACTT      480
TCTCACAGCT TACATAGCCA TCCAGAGATC CACAGCTACG TCACTGAATT GTTAATGCAC      540
ATTTGTACTT GGTITCTCTG TATCTATTCA CAGGCGAACT CGAG      584

```

(2) INFORMATION FOR SEQ ID NO:1004:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

```

GAATTCGGCC TTCATGSCCT ACTTTCTCAT TCCCTAAGTC ATTAGAAAGC ACCAGTTCTA      60

```



```

ACTCCAAATG ATGACATGGT CTTATTTTAT CTATTAACCA TAAGCTTACA GATTCTAGTG      120
AAGAAAAAAC TTTAGGAGGC TACATGGTCT ATTGGAGAGT GTAGGCTCTG CAGTCAGAAG      180
ATCCCTACCC AGGCTTCTGT CTTTCTCAGT AAGACTTGGG ACCACAGCAA GGTCCGCAAT      240
CTCCTGAGGC TCTGTTTTCT ATGGTTGGGA TAACATGGTA AGTTATTTTC TTCTAAGTAG      300
TCACACATGG AAATCTTATC TAAAATTTTA TACCATTAAC TTTTATTTCA CTTATTAAC      360
CATACCATTA ATACTTTTACT TTAGCTATGT TTGGTATGCA TGAGTTGATG AGTGATTAGA      420
GTACTATGAG CGATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1005:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

```

GAATTCGGCC TTCATGGCCT ACTCAGTTGC AGATTCTGGC CAACATGGAC AGCCAGCTAA      60
AAGAGCTACA GAGTCAGCAT ACCCATTTGTC CCCAGGACCT GGCTATGAAG GATGAGTTAC      120
TCTGCCAGCT TACCCAGAGC AATGAGGAGC AGGCTGCTCA ATGGCAAAAG GAAGAGATGG      180
CACTAAAACA CATGCAGGCA GAACTGCAGC AGCAACAAGC TGTCTGGCC AAAGAGGTGC      240
GGGACCTGAA AGAGACCTTG GAGTTTGAG ACCAGGAGAA TCAGGTGCT CACCTGGAGC      300
TGGGTCAGGT TGAGTGTCAA TTGAAAACCA CACTGGAAGT GCTCCGGGAG CGCAGCTTGC      360
AGTGTGAGAA CCTCAAGGAC ACTGTAGAGA ACCTAACGGC TAAACTGGCC AGCACCATAG      420
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1006:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

```

GAATTCGGCC TTCATGGCCT AGAGTAGCCA GGGAGCTGGA AGTCCACAG ATTGGTTTAA      60
ATAAACAAAC TCCCTCAATG ATGAGTGGTC TTTGAAGAG CATGGTTAGA ACTTGGGATT      120
GTGCTTCTCA TGACTACAAA TGTACTGTA GCTTAGGTGC AAAAGGGTAG GTCAGTGGGT      180
AGCTAACTAC TGAGGATTGA TTTTCTGAC GCTGGTGTG AAGTGTACC CAGAACTGGC      240
ATATAAAGTG GCTCATTAC CCAAGTATCT TCCTTCTCT TTTACAAAAT CCTTGGCTGT      300
TGTGGGGCCT ACATCTCTC ATGATTATTA TTGCATCTGG TGTCACTGTT TTCCAGCTGG      360
TGTACTGCTT CCCTGTAGGC TTCTTGATGT TCACTCTCTG AG

```

(2) INFORMATION FOR SEQ ID NO:1007:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

```

GAATTCGGCC TTCATGGCCT ACTGGTGCCA CGGGAGGCAG ACACCAAGTT CTGGGGTCTC      60
CAGCTGCAGT GGGTGGCCGC CAATTGCTTC TCTCTGTCCA GACTAATGAG AACATGGAGA      120
TCACCAAGTGC ACTGCAGTTG GAATAGCACG TAAAGAGGGA GCTGGGAAAAG AAGCTGGGCA      180
AGCTAAAGGA CATGGTAACC CTGCCCCATC CAAGAAGAGC TGGAAAGGCG GCACCAGCCT      240
CTGGGGAGGG GAGGTGTGAA GCCAGAGGCA GCTCCAGCCT GGGGGACAGG TGACCCAGC      300
ACCCTCCAGG GCAGTCTCTG GACTGTTTCT TGCTTCCCGC CCTCTGACAT TTAGTGGTGG      360
GTCGTTCTT CCTAGGTCTG GACATCATCA TCCCAGCTGG AGTCATGGAG CCTCCCAAAC      420
ATAGGGAAAG AGATGGTGGT ATAAGAGGCT CTCGAG                                456

```

(2) INFORMATION FOR SEQ ID NO:1008:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 564 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

```

GAATTCGGCC AAAGAGGCCT AGGATGGCTG TGTTTGACGG GTGTTGCTCG TGACAGTTGG      60
GGTCCTCCTC AGCATCAGTC TTGACATGGC TGCAACTGGG GGGGTCTCTG GGATCCTCCC      120
GGAATCTCTT CCTCAGCATT CGCTCATGAT AAGGTTTCAG GTGCTTTGAT GGTTTCAGTCC      180
TGGAGAAACA TAAGCATAAC CTCTACCCCA AGTTATTATT TTACCTATTT CCCAACTTTC      240
TGTTATCAGG TCTCTCCACC AAACCAGTTG TTCTGCTTCT GTCTTTGCAG CTGGTTTCTG      300
TAGATGCTGT TCAGCTGCTG ATAAGATCCG GCCTTTAGGC AGGCTCAAAA AATTAAAGT      360
TAATAATGCG ATTCAATTGC TTATGGGGTG TCCTGTAGTA CCTGTTTTCG CCCTTTTGCT      420
TCTGCAACTG CTGTTTCAGG GAGAGATTCA TTCTTTCCAC TATGGCNGT CCTTCAGAAT      480
TATATGGGAT ATCAGTAATG TGTTTAATAT TCCGTATAGA GAAAAATTTA GCTAGAGCTT      540
GAGAAATTAG TTCCAATCCT CGAG                                564

```

(2) INFORMATION FOR SEQ ID NO:1009:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 661 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

```

GAATTCGGCC AAAGAGGCCT AGAAAAAGAT GTCATTCCGT AAAGTAAACA TCATCATCTT      60
GGTCCTGGCT GTTGCTCTCT TCTTACTGGT TTTGCACCAT AACTTCCTCA GCTTGAGCAG      120
TTTGTTAAGG AATGAGGTTA CAGATTGAGG AATTGTAGGG CCTCAACCTA TAGACTTTGT      180
CCCAAATGCT CTCCGACATG CAGTAGATGG GAGACAAGAG GAGATTCTCG TGGTCATCGC      240
TGCACTGAA GACAGGCTTG GGGGGGCCAT TGCAGCTATA AACAGCATTG AGCACAACAC      300
TCGCTCCAAT GTGATTTTCT ACATTGTTAC TCTCAACAAT ACAGCAGACC ATCTCCGGTC      360
CTGGCTCAAC AGTGATTCCC TGAAAAGCAT CAGATACAAA ATTGTCAATT TTGACCCTAA      420
ACTTTTGGA GGAAGAGTAA AGGAGGATCC TGACCAGGGG GAATCCATGA AACCTTTAAC      480
CTTTGCAAGG TTCTACTTGC CAATTCTGGT TCCCAGCGCA AAGAAGGCCA TATACATGGA      540
TGATGATGTA ATTGTGCAAG GTGATATTCT TGCCCTTTAC AATACAGCAC TGAAGCCAGG      600
ACATGCAGCT GCATTTTCAG AAGATTGTGA TTCAGCCTCT ACTAAAGTTG TCGATCTCGA      660
G                                661

```

(2) INFORMATION FOR SEQ ID NO:1010:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

```

GAATTCGGCC TTCATGGCCT AGGAAAGATT TGA CTGCTTC TCTCATGCAG GGGAAATAAG      60
CAAAGGCACG TGCAGAGGGA AGTAGGGGTA GAGAGAGGCA AGTTAGCTTC AGAGAGATTT      120
ATTTGCACCC AGTTCTGTTT TACTCAGCCT GACGTTTTAT CATCTTTTTC AAAAGTGGCG      180
TGAAGTGGTG TGGAACACAT CAGAGGGTGA AGCCGAGCAA ATCTGAAAGA GAGCAGAGGA      240
TTTCATATGA TATCCTATGT GTGCTTTCCC CTTCTTCTT AGGAGCTGGA AGAGGCAGAA      300
TTGATGTCCA CTCGAG                                         316

```

(2) INFORMATION FOR SEQ ID NO:1011:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

```

GAATTCGGCC TTCATGGCCT AGAAACATGC TAGACATTTT GAAGAACCAG CAAGAATGTT      60
AGTGTAGCCA ACAGTGAGGC AGGCAAAGGT GAGTAAGGTA GATTAGTTCA GGAAGAAAAA      120
CATAACATTA TTTAATCCAT TGTGGGCCAC ATTGCACTAT GATAACACTA TCATGTCATA      180
GAGTCTCACC ATTGTTTAAG ATGTTTAAAT TTTTAAATAC GAATATATTC TCACACCCCT      240
CGAG                                         244

```

(2) INFORMATION FOR SEQ ID NO:1012:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

```

GAATTCGGCC TTCATGGCCT AGCACTTCCC GAGACTCTCT AGCCTTGGAT AAAGAGAGAA      60
TGGATAAAGA TCTGGGATCT GTGCAGGGAT TTGAAGATAC AAATAAATCC GAGAGAACTG      120
AGACTCTGGA AGGAGATGAC GAGTCCAAGT TAGATGATGC ACATTCATTA GGCTCTGGTG      180
CTGGAGAAGG ATACGAGCCA ATCAGTGATG ACGAACTAGA TGAAATTCTG GCAGGTGATG      240
CAGAAAAGAG GGAGGACCAA CAGGATGAGG AGAAGATGCC AGATCCCTTA GATGTGATAG      300
ATGTGGATTG GTCTGGTCTT ATGCCAAAGC ATCCAAAAGA ACAACGAGGC TCGAG      355

```

(2) INFORMATION FOR SEQ ID NO:1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCC	TTCATGGCCT	ACAGCCTAAA	TGTTTTATTT	CCTGAGAGGC	TGGAATCTGT	60
ATTTGTGGTA	TCAATCAGTC	AACTGAAATT	TATTTAAATGC	CTGCTGTGAG	CAAGGCCTAA	120
TGCTGAGGGA	TGTAAAGAAG	AGTGAGAAGC	TAGTCTGGTT	GGGNTATAT	GACATGGCAA	180
GTATAGAAT	GAAGAAGCGT	ATTCCTTGTC	ATATGAAAGC	TGCAGATTAG	TGTGGTTCTA	240
AGTAGAGGCC	AGGGTCACTG	GAGTCTAGGA	TTGCAGGGTT	GGCTGGCTTC	CCAGAGGCTA	300
AGAATTTAAT	TTGGATCTTG	AAGATCTGGT	CCAATTCCAA	CANGACTCGA	G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 393 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GAATTCGGCC	TTCATGGCCT	AGGCCTTGTA	TTTTTTCTTA	TTTTCTGCTA	AATTAGAAAG	60
AAATTTGCTG	TTTCAAATAT	ACTCAAGCTG	TTCAGTTCTT	CAACAAAAG	TAGGTGACTG	120
AAACTGTAT	GTTTAACTAT	GCTTAAGTTA	ATATTTATAG	TAATGATAGA	AGCCATTTTA	180
TTGGCAATAT	ATCACTTCCT	GATTTCCACA	CCAGGCATTC	CCACATGCAC	AAACAGGTGT	240
GTGGGAGGAA	GGGAAATGGG	CAAAAATGAT	TTCTTCAAG	AGGCTACTGA	GAATGAAAAC	300
TCAAAATCTG	CACAAATAGG	GGTGGTGGAA	GGAGAGAAAG	AAAACCCAT	GCCAGAAATA	360
ACATGCTTAG	CAGAGAGAGA	GAGAGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 262 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC	TTCATGGCCT	AACTCAGTTG	GCTTCTAATT	TGCGTAACAA	GATTAAGGTA	60
GTATTTTGT	ACTATTATTG	GAAGCATGCC	TTCCCTTTT	CACATTATTA	AATTGTATTT	120
ATATTTGTGC	AATTTTAAAC	TATGTTTCA	AATAAACTTT	GTCTGCGGCT	TCGAGGTCTT	180
TTCAGGAATC	TTTCAAAATG	GGATTGGGG	ATCAGAACTC	CTTCTGATCA	AATGGAATCC	240
AATTTGTACT	ACTGGTCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 304 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

CAGAATGGGA	CTCCAAGCCT	GNCTCCTAGG	GCTCTTTGCC	CTCATCCTCT	CTGGCAAATG	60
CAGTTACAGC	CCGGAGCCCG	ACCAGCGGAG	GACGCTGCCC	CCAGGCTGGG	TGTCCTGGG	120
CCGTGCGGAC	CCTGAGGAAG	AGCTGAGTCT	CACCTTTGCC	CTGAGACAGC	AGAATGTGGA	180
AAGACTCTCG	GAGCTGGTGC	AGGCTGTGTC	GGATCCCAGC	TCTCCTCAAT	ACGGAAAATA	240
CCTGACCCTA	GAGAATGTGG	CTGATCTGGT	GAGGCCATCC	CCACTGACCC	TCCACACGCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GAATTCGGCC	AAAGAGGCCT	AGTTTAAAGA	AAAAAAAAAA	GACCCATCAA	GGGCATAGAA	60
AAGCTTAGGT	GAAGAAACCC	TAAATGAAT	CCTCATTAT	CAACTCATTC	ATTTATTGAT	120
TCATTGTTC	ATTCAATTGT	TCACCAAGA	AGTATTTGTT	GCCAGACACA	GTACCAACAA	180
AGAAAATAAG	CATCCACTAC	GGCTTTGCAG	AGCTTGGTAC	GCAATGCCTG	GTTTCAGAGGA	240
GATATTTGTT	CATCGCTTGC	TTTAACTGT	ATCACAGCCT	AGGGTGGCAT	GCAGAGGTTT	300
GAATAAGTGC	TGAAACAGGA	CAAGTGAGGT	GCTTATGGAA	ACACACAGGC	TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GAATTCGGCC	AAAGAGGCCT	AGAAGGAAAT	TGTCCCGAAT	CCCTGCAGTC	TTTCTGTAGG	60
TTGCGGCACA	ACGCCAGGCA	AAAGAAGAGG	AAGGAATTTA	ATCCTAATCG	GTGGAGGTCG	120
ATTTGAGGGT	CTGCTGTAGC	AGGTGGCTCC	GCTTGAAGCG	AGGGAGGAAG	TTTCCTCCGA	180
TCAGTAGAGA	TTGGAAAGAT	TGTTGGGAGT	GGCACACCAC	TAGGGAAAAG	AAGAAGGGGC	240
GAACTGCTTG	TCTTGAGGAG	GTCAACCCCC	AGAATCAGCT	CTTGTGGCCT	TGAAGTGGCT	300
GAAGACGATC	ACCCTCCACA	GGCTTGAGCC	CAGTCCCACA	GCCTTCCTCC	CCCAGCCTGA	360
GTGACTACTC	TATTCCTTGG	TCCCTGCTAT	TGTCGGGGAC	GATTGCATGG	GCTACGCCAG	420
GAAAGTAGGC	TGGGTGACCG	CAGGCCTGGT	GATTGGGGCT	GGCGCCTGCT	ATTGCATTTA	480
TAGACTGACT	AGGGGGCTCG	AG				502

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

```

GAATTCGGCC AAAGAGGCCT AATCAAATAG TAAAGGCTGT TCTGGCTTTT TATCTTCTTA      60
GCTCATCTTA AATAAGTAGT ACACTTGGAT GCAGTGCCTC TGAAGTGCTA ATCAGTTGTA      120
ACAATAGCAC AAATCGAACT TAGGATTGTG TTCTTCTCTT CTGTGTTTCG ATTTTGTATC      180
AATTCTTTAA TTTTGAAGC CTATAATACA GTTTTCTATT CTTGGAGATA AAAATTAAAT      240
GGATCACTGA TATTTTAGTC ATTCTGCTTC TCATCTAAAT ATTTCCATAT TCTGTATTAG      300
GAGAAAATTA CCCTCCAGC ACCAGCCCCC CTCTCAAACC CCCAACCCAA AACCAAGCAT      360
TTTGAATGA GTCTCCTTA GTTTCAGAGT GTGGATTGTA TAACCCATAT ACTCTTCGAT      420
GTACTTGTTT GGTTCGTAT TAATTTGACT GTGCACGATC TCGAG                          465

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(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

```

GAATTCGGCC TTCATGGCCT AGGATTTCGT ATGCAAGCTC TTGTTTCTCA GGCTGCCTGC      60
AGAAGAAGTC GCTATAAATT ATCTGTTGTC TACATGGTAC AAGGCCCATI GACTCATCTAG      120
ATGCTTGTTT TGTTAATTTC TTTAATATTT TTATCACGGG GCAGTGGGAG GGCTTGGGCT      180
TTTAGCCACA GCTGTTTTAA GACTTCTGAT CTCCTGCCCT GCAGGAATAG GTGGCAACTC      240
GAG                                                                243

```

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

```

CTCCACCGAG AGCCTGGACA GTATGAAGGC TCTGACAGCC GCCATCGAAG CTGCAAACGC      60
CCAGATCCAT GGCCCTGCCA GTCAACACAT GGGCAATAAC ACTGCCACCG TCACCACCAC      120
GACTACCATA GCCACCGTCA CCACGGAGGA CAGGAAGAAG GACCACTTTA AGAAAAATCG      180
ATGCCTGTCT ATCGGGATAC AGGTGGATGA TGCTGAAGAA CCTGACAAA CAGGGGAGAA      240
TAAAGCACCC AGTAAGTTCC AGTCCGTGGG AGTGCAAGTA GAAGAAGAGA AGTGCTTCCG      300
CAGGTTCACT CGATCCAACA GTGTGACGAC AGCAGTACAG GCCGACCTGG ACTTCCATGA      360
TAATCTGGAA AATTCTCTGG AATCTATAGA GGACAATTCT TGTCTGGCC CCATGGCCAG      420
ACAGTTCTCC CGCGATCTCG AG                                          442

```

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAATTCGGCC TTCATGGCCT AGATGATCAG GTTTTCTGG ATGGAAATGA GGTGTATGTA	60
TGGATCTATG ACCCAGTTCA CTTTAAACA TTTGTCATGG GATTAATTCT TGTGATTGCA	120
GTAATAGCGG CCACCCTCTT CCCCCTTTGG CCAGCAGAAA TGAGAGTAGG TGTATTATAC	180
CTCAGTGTGG GTGCAGGCTG TTTGTAGCC AGTATTCTTC TCCTTGCTGT TGCTCGATGC	240
ATTCTATTTC TCATCATTTG GCTCATAACT CGAG	274

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCGGCC TTCATGGCCT ACTTTTCCAG AAACCAAGAG TGGCTCTACT GTGGCTATAT	60
TATTATTGTT ATTATTATTA TTTTGAGAT GGGGTCTCAC TTTGTCATCC AGGCTGGAGA	120
GCAGTGGCAC CATCATAGCT CACTACAGCC CCAAAGTCT GTGCTCAAGG GATCCTCCTG	180
TCTCAGCCTT CTCGAG	196

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCGGCC TTCATGGCCT AATCATTTAT ATAAAGTTTA AAAACATTTT AGAACTGAAC	60
TATATATTTT TAGAAATATC TGCATATGCC ACATAAATTT TTAAATCAT AAGAATGCTA	120
AACAGCACAT TCAGGACAGG GTGAAGAAAC AGGCATGCAG GTTGTCAGT AGGAAGCTGG	180
GTAACATTGT TCCTTATGGC TTTGTTGTCG CTTCAGAAAT TTCATTAAAA ACTTTTAAA	240
AAACATGGGC CCACATTATG AATTACGTCT GCTTTTAGAG TACTAAAAAC TCCAAGCAA	300
AACACATGAG CCACCGGGCA CGCCTGGCCT TTATTTTATT TTTCTAGTT ATTATTCCTG	360
TTTTCAGAGG AGGGAATTGT CAGGGAATC TCGAG	395

(2) INFORMATION FOR SEQ ID NO:1025:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

```

GGAGAGCTCT GGGCCAGCCC TTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT    60
CTCTCTCTCT CTCTCTCTCT CTCTCTCTCT CTCTGTGTGT GTATATATAT ATATATANAC    120
TTTTCCCTTC TGGATGCAAT AGAGCTATTT TTTTCTCTTT GGAATTGAGT GACACCACCA    180
AGATACGTTT TTGGGTTGAA TATGTGTGTT TTTCAAAAT CAGTCTGGCC TTTTGTGTG    240
TTGTTGTTGT TGTTCCTTT AGATGGAGTT TCACTCTTGT TGCCAGTCT GGAGTGCAAT    300
GGCACTATCT CTACTCACTG CTACCTCCGC CTCCCAGGT CAAGCAATTC TCCTGCCTCA    360
GCCTCCAAG TAGCTGGGAT TATAGGCATG TGCCACCATG CCCAGGCAGT TTTGTATTT    420
AGTCTCGAG                                         429

```

(2) INFORMATION FOR SEQ ID NO:1026:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

```

GAATTCGGCC TTCATGGCCT AGAGAACTGG AGCCAGCTGT CAACTGCCCC CGCCCCACCC    60
AGGCCATTTC GCTTCTGCTA CCGGCATGCT GCTCAGGGCT CTGCCCAAGG ACAACGACGA    120
GCCCCCTGTG TCCTCTCCTG GGTCATCTTC CATGACCCTG AGGCAGCGAA GACAAGCTCG    180
GCAGTCCCT GAGCTGCTT ACACCAACTA CCTATGAGTC TGAGGCCAGC ATCCAGGCGC    240
TGCCAGACC CTGAGAGTCC CTGGACCATG ACGTAGCCTG TGTGTGAAGG GAGCAAGACA    300
GCCTTGACAG AAGCACAGAG AACGCCACTG GGATTCTTAA AGACGCGAAG GGAAAAAGCA    360
CAGAAGATGC TGGCGCTGCA TCTCTCCAG CACCGAGAGG CCTCGAG                                         407

```

(2) INFORMATION FOR SEQ ID NO:1027:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 402 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

```

GAATTCGGCC TTCATGGCCT AAATTAATAT CCTTATTTT GCAGATTAGG AAACCTAAGAC    60
GTACTGAGGC TGGGTGCCTG GTTCAAGATC ATATAGCTAA CATTATTGGA CATGCAAATC    120
AAGCCAGAT TTGTGACTCT GAGCTGATGT TAATTCTGTC ACAATATTGG TTCTCAAGAT    180
AAATCTTCC AGGTGAGGG GAAAGGGAAT AAATATCTAG AAGTCCCC'T AAACAGAAGT    240
AATTAATTCC TTTGCAGAAA TTGGCAAAAT TTGGGGTTCC CTTCTTAAAA GTTTCCTTCT    300
GTCACTTGGG AAAAAATTAA AATATGTGCA TTAGGTTGAC AAAGATCAAA AAAGTTAAAA    360
AAAAACCCTT TTTGGAATGC TGTGAGAGAA GTAGCACTCG AG                                         402

```

(2) INFORMATION FOR SEQ ID NO:1028:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:


```

GAATTCGGCC TTCATGGCCT AAGGGGCTGA AATTAAGAAT GTGGCTTTTT TATCCTTTCA      60
AAAAATAGATT ATTTGGCTGG ATGTGGTGGC TCACGCCTGT AATCCTAGCA TTTTGGGAGG      120
CTGAGGCAGG CAGATCACCT GAGGTAAGGA GTTCAAGACA AGCATGTCCT GGTGAAACCC      180
CATCTCTACT AAAAATACAA AAAATTAGCC AGGTGTGGTG GCAGGTTCCCT GTAGTCCCAG      240
CTACATGGGA GGCTGAGGCA GGAGACTCAC TTGAACCCGG AGTGTCTCGA GGCAGGTCTA      300
GAATTCAATT AGGCCATGAA                                     320

```

(2) INFORMATION FOR SEQ ID NO:1029:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

```

GCAGATTTC GCTCTCATCC CATATCTATT GAGAATGCTG TAGTTGAGGG TTGTTAGAAA      60
CCTGCATTTT ATTAAATCC CTCCAGGTGA TTCTGATGCA GGCTAGTTCA GTAAACAATA      120
TCAACTAGTT TTCATAAGA AAACCTCTGG AGGGCCCATG GTGCCTGCAC TCCAGGTCTC      180
AAAGTATACT TTGAGATCTA GGTATCTGCA CAAGGTGCTA TCCTGAAAGG ACTCTAAATG      240
AGACAACTCG AG                                     252

```

(2) INFORMATION FOR SEQ ID NO:1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

```

GAATTCGGCC TTCATGGCCT ACCTTATGGC CTAATTAAAT ATTAGTAATA GGTATTCGAT      60
TTGTTTTTAA ATGATTTCTT GTAATAGACT ATTGGGTCAG CTAATACTTT TTTGCATCTT      120
CATATTTTAT GTCATGTTAA TGATAAATT TCTGACTTGG ATTTGTATGT TTTTGCCCTT      180
TATCCTCTTA GGTGGCCTTG GGGGACTTGC AGGTCTGAGT AGCTTGGGTT TGAATACTAC      240
CAACTTCTCT GAACTACAGA GTCAGATGCA GCATCTCGAG                                     280

```

(2) INFORMATION FOR SEQ ID NO:1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

```

GAATTCGGCC TTCATGGCCT AGAGCAAGTG GTTTTTAAAT ATCTTCGAGC TGAACCTGAG      60
GACCATTATT TTTTAATGAC AGAACCTCCA CTCAATACAC CAGAAAACAG AGAGTATCTT      120
GCAGAAATTA TGTTTGAATC ATTTAACGTA CCAGGACTCT ACATTGCAGT TCAGGCAGTG      180

```

CTGGCCTTGG CGGCATCTTG GACATCTCGA CAAGTGGGTG AACGTACGTT AACGGGGATA 240
GTCATTGACA GCGGAGATGG AGTCACCCAT GTTATCCCAG TGGCTCTCGA G 291

(2) INFORMATION FOR SEQ ID NO:1032:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

TAAAATAATT TAACTTTTTT ATTACATTAA AAAACAGGAC TCTGGGAATT GTCACTTTAT 60
GATCAGCCTT ATATTTTTTC CAGACTGTGT CATTGTGTAT GCCTGTGCCA CCCAACGGAT 120
GAGACCACTG ATCATGTTTA GCTCAAATTT ATGTTGGATA GAGGTTATAG GATGGTCCTT 180
ATCTGAATGC AGAAAGGAAT GTTATTTTGT CTGTTATGTT TTATATGGGA TAATACTTTA 240
TAATTGTGTG ACTATCCTAT TCCCAACAA ACTCGAG 277

(2) INFORMATION FOR SEQ ID NO:1033:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTCGGCC TTCATGGCCT AGGTTACATG TATAAAATAA TCGTAGCTGT TAATCAAAC 60
GATCATTGTC TATTTGTTGT TTCACATGTT TTCATTATT TGTTCAATCA GCAAACACTT 120
AGTTGTGTGC CAGGAATTAA AATCCAGTGT TGTTCTTTTC TTATTTTTTT TTTGGCTAGT 180
GGAAAATGAA AACCACCTGT ACTTTGTAAA GCTGCGGGAA ATGCTCATT GTACAAATAT 240
GGAGGACCTG CGAGAGCAGA CCCATACCAG GCACTATGAG CTTTACAGGC ATCTCGAG 298

(2) INFORMATION FOR SEQ ID NO:1034:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGA AGACACTGAC TGACTGGAAG ACCTGGATT CTTTCTGGAA GACACTGATT 60
GACTGGAAGA CCTGGATTTC TTTCTGGAAG AACTGATTG ACTGGAAGAT CTAGATTTT 120
CTGGAAGAAC TAGATTTACT GGAAGACTTG GATTTGGTGG AAGACGTAGA TTTTCTGGA 180
AGACACTGAC TGACTGGAAG ACCTGGATT CTTTCTGGA GACACTGATT GACTGGAAGA 240
CCTGGATTTC TTTCTGGAAG AACTGATTG ACTGGAAGAT CTAGATTTT CTGGAAGAAC 300
TAGATTTACT GGAAGACTTG GTAGGCCATG AAGGTCGAG 339

(2) INFORMATION FOR SEQ ID NO:1035:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

GAATTCGGCC AAAGAGGCCT AGCACTGTAA AGATGAAGCT GGCTAACTGG TACTGGCTGA	60
GCTCAGCTGT TCTTGCCACT TACGGTTTTT TGGTTGTGGC AAACAATGAA ACAGAGGAAA	120
TTAAAGATGA AAGAGCAAAG GATGTCTGCC CAGTGAGACT AGAAAGCAGA GGGAAATGCG	180
AAGAGGCAGG GGAGTGCCCC TACCAGGTAA GCCTGCCCCC CTTGACTATT CAGCTCCCGA	240
AGCAATTCAG CAGAGATCTC GAG	263

(2) INFORMATION FOR SEQ ID NO:1036:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

GAATTCGGCC AAAGAGGCCT AAAGCACCCG CTCCTCACC ACCCCCACTG TTGGGCCTAT	60
AGTAGCAGGT TAGTGAGTAC CTAGGGCGGC TCAACTCCTC CCACAGCACC AACCCAGCAT	120
GGTCCCACTG AAGTCCTACT ACGCCCTCCC CTCCTCAGCC TTTCCAGAA ACCATACTGG	180
GCTCAGATCA GAGCTCCGAA GCGGTCAAAG TGAGCTGAGC AGGACAGGCC CAGCCTTTCT	240
CCACTGCCAC GTCACCCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1037:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

GAATTCGGCC AAAGAGGCCT ACGGAGCTGT CAGCCAGGGG AGTGGGGTCA GCCGTCAGCC	60
AGCCCTCCCG TTTCCCGCCC GTGGGCCCTG ACCACACTCC CTTTCTAGA AGTCAATCCT	120
AAGGTTTCTC TGCTCTGGCT AAGAGGATGT AAATTTGGAT TCTTAGAGGG CATGGCACCC	180
CCAGTCCCTG CCCAGATAAA GTAGCACAGT GGCATGCAGC ACCTCTGTCT GTTGCTGACG	240
TTGGGGGGCT TACACACCCA CCTCATCTCC GTGCACAGAC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:1038:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

GAATTCGGCC	TTCATGGCCT	AGCTCTGCAA	GGAAGAGAGC	TTCACGTCTC	TGGTCAGCCA	60
AGCGAGGCTG	TCTCTCCAGC	TCTCAGAGAG	CTCTCGGGGC	TCTCCTGCAG	GAGACCAGGC	120
CAATGCTCCT	GTGCTTCCTG	GGGCCAGTAG	CAGCACCCCTG	AGCTCCCTGC	CACCAGGCAG	180
CTGAAAGGCA	TAGCGTGAGG	TGCTTCTCTC	AGTCCCAATT	ATGACAGTGG	CCACCGGAGA	240
CCCAGCAGAC	GAGGCTGCTG	CCCTCCCTGG	GCACCCACAG	GACGCCTCGA	G	291

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

GAATTCGGCC	TTCATGGCCT	AACTCTACAG	CAGTGCTTAT	TTTACATT	CCAAGCGAAT	60
ACCAAAACCT	TCAGCAAAGA	TTGGGTGGT	ATTAACGGGT	TTTTGTCTCA	GAAGTGTATT	120
GTGGATCCCG	GAGTTTCCCC	CAAATCCATC	TACATCAAAT	TTGTAGAAGT	AGAGAGGGAT	180
TTTCTTTCCG	CAGGCTCTTT	AGTTGAGTGC	CTGGAAAAAG	CCATTGGATA	CCCCTTAAAA	240
TTTAACAAC	GAATGTCATC	CTTCATAAGG	ATTGGGGCTC	TAGCTCCTT	CTTCTCTACT	300
CACTTCCCAT	TACCGGAC	ACCCCTCATC	CAGATGCCGC	CGTCAGACTC	TTCATGGAAA	360
CCCTTTCTTC	AATTGGGCCA	GTACGATCTC	GAG			393

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

GAATTCGGCC	AAAGAGGCCT	ACCCTACTGT	GACACACCTA	CCATGCGGAC	ACTCTTCAAC	60
CTCCTCTGGC	TTGCCCTGGC	CTGCAGCCCT	GTTCACTA	CCCTGTCAA	GTCAGATGCC	120
AAAAAAGCCG	CCTCAAAGAC	GCTGCTGGAG	AAGAGTCAGT	TTTCAGATAA	GCCGGTGCAA	180
GACCGGGGTT	TGGTGGTGAC	GGACCTCAA	GCTGAGAGTG	TGGTTCTTGA	GCATCGCAGC	240
TACTGCTCGG	CAAAGGCCCC	GGACAGACAC	TTTGCTGGGG	ATGTACTGGG	CTATGTCACT	300
CCATGGAACA	GCCATGGCTA	CGATGTCACC	AAGGTCTTTG	GGAGCAAGTT	CACACAGATC	360
TCACCCGTCT	GGCTGCAGCT	GAAGAGACGT	GGCCGTGAGA	TGTTTGAGGT	CACGGGCCTC	420
CACGACGTGG	ACCAAGGGTG	GATGCGAGCT	GTCAGGAAGC	ATGCCAAGGG	CCTGCACATA	480
GTGCCTCGGC	TCCTGTTTGA	GGACTGGACT	TACGATGATT	TCCGGAACGT	CTTAGACAGT	540
GAGGATGAGA	TAGAGGAGCT	GAGCAAGACC	GTGGTCCAGG	TGGCAAAGAA	CCAGCATCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCGGCC	TTCATGGCCT	ATAGAAACAT	CAGTGGGCAC	ATTTACAACC	AGAATGTATC	60
CCAGAAGGAC	TGCAACTGCC	TGCACGTGGT	GGAGCCCATG	CCAGTGCCTG	GCCATGACGT	120
GGAGGCCTAC	TGCCTGCTGT	GCGAGTGCAG	GTACGAGGAG	CGCAGCACCA	CCACCATCAA	180
GGTCATCATT	GTCATCTACC	TGTCCGTGGT	GGGTGCCCTG	TTGCTCTACA	TGGCCTTCCT	240
GATGCTGGTG	GACCCTCTGA	TCCGAAAGCC	GGATGCACAC	ACTGAGCTCG	AG	292

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAAGAAAAGC	AGAAAGAACT	GGCAGAAACA	GAACCCAAAT	TCAACAGTGT	GAAAGAGAAA	60
GAAGAACGAG	GAATTGCTAG	ATTGGCTCAA	GCTACCCAGG	AAAGAACGGA	TCTTTATGCA	120
AAGCAGGGTC	GAGGAAGCCA	GTTTACATCA	AAAGAAGAAA	GGGATAAGTG	GATTAAAAAG	180
GAACTCAAGT	CTTTAGATCA	GGCTATTAAT	GACAAGAAAA	GACAGATTGC	TGCTATACAT	240
AAGGATTGG	AAGACACTGA	AGCAAATAAA	GAGAAAAATC	TGGAGCAGTA	TAATAAACTG	300
GACCAGGATC	TTAATGAAGT	CAAAGCTCGA	G			331

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 268 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GATGGCCACT	TCCCAGGCTG	ACATAGAGAC	CGACCCAGGT	ATCTCTGAAC	CTGACGGTGC	60
AACTGCACAG	ACATCAGCAG	ATGGTTCCCA	GGCTCAGAAT	CTGGAGTCCC	GGACAATAAT	120
TCGGGGCAAG	AGGACCCGCA	AGATTAATAA	CTTGAATGTT	GAAGAGAACA	GCACTGGGGA	180
TCAGAGGCGG	GCCCCACTGG	CTGCAGGGAC	CTGGAGGTCT	GCACCAGTTC	CAGTGACCAC	240
TCAGAACCCA	CCTGACGCAC	CCCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 391 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

```

GTCATTGCAT CCAAGATAAT GAAATATCTA TAACCCCAAA AGTTTCCTGT GTCCCTTGT      60
TATTCATTGC CTGCCCCAGT ATTCAGGCAA CACGGATCTG TTTCTGTTT TAGGTTAGTT      120
TGCATTTTCT ATAAAGTCTT ATGAATGAAA TAATAAAATG TGGACTATTT TCATGGGCCG      180
GGGAGCAGTG TGGCTTCTTT CATTTCAAAT GATTGTTTTG AAATTCATCC ACAGCGTTGC      240
ACGTATCAGT AGTAGATTCC ATTTGATTGT TGATTGTAT TCTATTGTAT GCCTGAGTCA      300
AAATTTATTC ATCTCTTGT CTGTTGATAG CCATTGGGT TCTCCAGTT TGGGGCCATT      360
ACAAATAGAG GTACTATGAA CTTTCTCGA G              391

```

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

```

GAATTCGGCC TTCATGGCCT AATGTGAGCC ACCGCACCCA GCCGAATATT TGTACTTTGT      60
ATAAATTCAT TGTCTGTTT ACAGTTTGAA TGGCTCTTTT ACCCTGGCAT AATTTTGTA      120
CGTGTGGAGC ATTTGGAATA TTTTATTGG ATTATGCAGA TATTTTCAAT GCTGGTATT      180
CATTATATGA TAGTAAAAA TCACTTTTG TTTGTTTTG TTTGTATTAT TTTCTTTTT      240
TTTTTGAGGC AGAGTTTCGT GCTTGTCGCC CAGCCGAAGG CGCTCGAG              288

```

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

```

GAATTCGGCC TTCATGGCCT AGTAACCTCA TAACATTGCT GGTGTTGAGG TGAATCTTAG      60
TGGTCATCCA GTCCCAAGGC ATCCTTGCCA GCCCCCTACA ATACCTGGAT GGGCGCTTAT      120
CTTCAGGTAG GCCTGAGCCT TTCTGGTAAA GAGGAGCTCA CTATTTCTAA AGGAAACCTG      180
TGCCATTGGG TTAAAAAAGT ATTAATTTT AAACATTGGT AGTTGTTAAG CAGTTGTGTA      240
ATATTTTGAG CCAAATTTG TTACCTCCA TACCTCGAG              279

```

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

```

GAATTCGGCC TTCATGGCCT AGCAGCATTC AAGGAATTAA TATTAGTCAC TGAGAACAAA      60
AAGCGAAATT AGAAAATTC AAGTCACTTC TAGGCTTGTA GGGGAGAAGA CGTGTAGTGA      120
TGAATTCTAT CATTATGAA GTACCCACTG GATCCACAC ACTGTGCAAG ACCTTTAGAT      180
CAGGCGCCTC CCTCGGTTTT CTTCAACCCTG TGCAGCAGGT GCTGTTATTT CCTTTTAA      240
ATTATTATTT ATTATTATTA TTTTGTGAGA CAGGATCTCC CTTGTCACT CAGGCTGGAA      300
TGCAGAGGCA TGATCACTGC TCACTGCAGC TTCGACCACC CGATCTCGAG      350

```

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

```

GAATTCGGCC TTCATGGCCT AAAGCTTTTC AGTACTGTTT ACAAATTTGG TTTTATTGTG      60
TCAACTTAAA AGCATGAGTC TAAATCTATT AGTCATACCA AATTGTTTCA TTTTATTTTA      120
TTTTATAGAG ATGGGGTCTT GCTGTATTGC CCAGGCTGGT CTCAAACGAC TAGGCTCAAG      180
CGATCCTCCC ACCTCAACCT CCCAAAGTGC TGGGATTACA GGTGTAAGCC ACCATACACA      240
GTTCTCAAT TATTTTATAC AATACAAACA TTTAAATAT AAATCATGCA CTCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

```

GAATTCGGCC TTCATGGCCT AGAGCTTTGG TGCTTTTCAC ATAAGGAACT TACTTGGGCT      60
AAAAAGTAAC CTCAGAGAAA CAGTGCTCCC ATTTGGTGGA TAAGGAACT GAGGTTCCAA      120
ACATGAGATG TAATAGCTTG CCCCAATCT AGCCAGTGAG CAAGAGAGTA GACTTTTGCC      180
TGTGCCAAAA CAGTAATCAC CATCCACAAG TGGCTATTTA AATTTTAATT ATTACAATTA      240
AATAAAGTTT AAAATCCAGT TCCCCAGTCC CACTGGCAAC TTAACAGCTA CCAGTGACTG      300
TACCATATAT AACAGCATAT ATAGACATAC AGCATATACA ACACATACAT AGGGATTCCC      360
ACTCGAG                                     367

```

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

```

GAATTCGGCC TTCATGGCCT ACAATTTTAA AATTAAATTT TTTTCTATTT TTTTGCAATT      60
ATCAACCTAA CACATTGAAG AAACCTGGGA AATATAGAAA AAACACACCA AAAAGTATCA      120

```

```

GAGTTACACT AAAATGTTCA TAGTCAGTAA TATAGTCTTT CAGATTTTTT TTTCTGTGTC      180
TGTCTGCTGT CTATGTCCAT GCCTACCTTA CTTTCTTCCC TCTCTCTTCC CTCCCCACCC      240
TCCCTTCCTT CCTTCCTCC TTCCACCTT CCCTGCTTCC TTCTTGCTG CCTCCCTTCC      300
TGCCTGCCCTC CCTTCCTGCC ACTTACATTG TGTTAAACAAT GAGAAAAAAA TTCCCCCATC      360
ACTCGAG                                         367

```

(2) INFORMATION FOR SEQ ID NO:1051:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

GAATTCGGCC AAAGAGGCCT AAGAAGACCT CAGCCTTCGC CTGAAAAAGC TGA CTCACGC      60
TGCCCCCTGC ATGCTGTTCA TGAAGGGAAC ACCTCAAGAA CCACGCTGTG GTTTCAGCAA      120
GCAGATGGTG GAAATCCTTC ACAAACACAA TATTCAGTTC AGCAGCTTGT ATATCTTCTC      180
AGATGAAGAA GTTCGACAGG GGCTCAAAAC GTACTCTAAT TGGCCACCTC ATCCTCAGCT      240
CTATGTTTCT GGAGAGCTAA TAGGAGGACT TGACATAATT AAGGAGCTGG AAGCATCAGA      300
AGAGCTGGAC ACGATCTGTC CCAAGCACC CAATCTCGAG                                         340

```

(2) INFORMATION FOR SEQ ID NO:1052:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 444 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

```

GAATTCGGCC TTCATGGCCT ACTATGGACA GCCACAGNTC TTCCAGGAC AAGACCCTGA      60
CTCACCCAG CATGGAACT ACCAGGGAGG GAGGGTCCCC CATCCTACTA TGACAACCAG      120
GACTTCCCTG CCACCACTG GGATGACAAG AGCATCCGAC AGGCCTTCAT CCGCAAGGTG      180
TTCCTAGTGC TGACCTTGCA GCTGTCGGTG ACCCTGTCCA CGGTGTCTGT GTTCACTTTT      240
GTTGCGGAGG TGAAGGGCTT TGTCGGGAG AATGTCTGGA CCTACTATGT CTCCTATGCT      300
GTCTTCTTCA TCTCTCTCAT CGTCCTCAGC TGTTGTGGGG ACTTCCGGCG AAAGCACCCC      360
TGGAACCTTG TTGCACTGTC GGTCTGACC GCCAGCCTGT CGTACATGCT GGGGATGATC      420
GCCAGCTTCA ACAACACACT CGAG                                         444

```

(2) INFORMATION FOR SEQ ID NO:1053:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 358 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```

GAATTCGGCC AAAGAGGCCT AGATATTCAT TTCCATTGGA GCTGGTATTT TTAAGGTCTC      60

```



```

GTGACGTCAG TGACCTCATT TTACTTGATC TATTAGCAGC ATTTCATACA GTTGTGACT      120
CTTCTCCATT AAAACATTTA CTTTATTTGG CTTCTAGGAA ACATATTTTC CTGCTTTTTC      180
TTCCTATTTT TCTGACTCTT TTCTCAGTTT CCTTTGCTGT TTCCTTTTCT ATCCTCTAAA      240
CATTGAAATA TCCTAAGCCT AGTTTGGGAT TCCCTTGATG GTCTTCATTT CTTFAATGGG      300
AAGTGTGCTG GTGACTCAAA TTTATATCTC CAGCCAGAAC CTTTCTCCTG AATTCCAG      358

```

(2) INFORMATION FOR SEQ ID NO:1054:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

```

CCTTCATGGC CTAATTCTGG TATTACATCA CACTGATCAT GCTGCTGGTG GCCGTGCTGG      60
CCGGAGCTCT CCAGCTGACG CAGAGCAGGG TTCTGTGCTG TCTTCCATGC AAAGTGAAT      120
TTGACAATCA CTGTGCCGTG CCTTGGGACA TCCTGAAAGC CAGCATGAAC ACATCCTCTA      180
ATCCTGGGAC ACCGCTTCCG CTCCCCCTCC GAATTCAGAA TGACCTCCAC CGACAGCAGT      240
ACTCCTATAT TGATGCCGTC TGTACGAGA AACAGCTCCA TTGGTTTGCA AAGTTTTTCC      300
CCTATCTGGT GCTCTTGCAC ACGCTCATCT TTGCAGCCTG CAGCAACTTT TGGCTTCACT      360
ACCCAGTAC CAGTCCAGG CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1055:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

```

CGATTGAATT CTAGACCTGC CTGTGCTCCT CGATGGTGTG TCTCCCTCCA GAAAACGCAT      60
GCTTATTGAC CTTGGTTTTG ATCTGCTTGG CCGTGTGCTG CGAG

```

(2) INFORMATION FOR SEQ ID NO:1056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 650 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

```

GAATTCGGCC AAAGAGGCCT ACACAAGGCT AAGGGTATTG GATATAACGG AAAGTGAAG      60
CTATACCTGA CTTCCAGAGA ATGTGGACCG GATATAAGAT CTTAATCTTC TCTTATCTTA      120
CTACAGAAAT CTGGATGGAG AAGCAGTATT TATCTCAAAG AGAAGTGGAC CTAGAGGCTT      180
ATTTCAGTAG GAATCACACC GTTTTGCAAG GTACTCGATT CAAAAGAGCC ATTTTCCAAG      240
GGCAATACTG TAGAAATTTT GGCTGTTGTG AAGACAGAGA TGATGGCTGT GTCACTGAGT      300
TCTATGCGGC GAATGCGTTG TGCTACTGTG ATAAATTCTG TGACAGAGAA AATTCTGATT      360

```

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GCTGTCCTGA CTACAAGTCC TTTTGCCGTG AAGAGAAAGA ATGGCCTCCT CACACACAGC      420
CTTGATATCC AGAAGGTTGC TTCAAAGATG GTCAACATTA TGAAGAGGGA TCAGTAATTA      480
AAGAAAACCTG CAACTCCTGC ACATGCTCAG GACAGCAATG GAAATGTTCC CAGCATGTAT      540
GCCTTGTTCC TCCAGAATTA ATTGAACAGG TCAATAAAGG AGACTATGGA TGGACAGCAC      600
AGAATTACAG CCAATTTTGG GGAATGACTT TAGAAGATGG ACTCCTCGAG      650

```

(2) INFORMATION FOR SEQ ID NO:1057:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

```

GAATTCGGCC AAAGAGGCCT ACACGTATTG GCCAGGATGG TCTTGATCTC CTGACCTCAT      60
GATCCGCCGG CCTTGGCCTC CCAAAGTGCT AGGATTACAG GCGTGAGCCA TCGCGCCCAG      120
CTGAGAATAG TTTTAAGAAAT TGGTTGAGAG GCAGTTGCTT TTTCTTTGAA TATCTAGAAC      180
TGTCTGGAC TAACGTCAA GAAACACCAT GGCAACATTA AAGGGAAGAT TATTGAGAG      240
GCGGGGGATA GTATGGCTTA GGACTTGGGC TGCTACCTTT GACTTTGTAA TTCAAAGAT      300
TGTAATGTTT CATATTTTCA ATCTGATCAT TAAAAATATC TGTGTTACAT GCAAAAAAAA      360
ACCTATAGGC AACTCGAG      378

```

(2) INFORMATION FOR SEQ ID NO:1058:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

```

GAATTCGGCC TTCATGGCCT AATTTTAACA TTTACATAGA CAATTCATTT GGTGTTTGT      60
CTCCTAGTTA TTTGGCCCAA TCTCTGATGA TTTCCACTCT GTCTTGGCCA CTCACCTCGT      120
TTGTATATATC TTGGCCATTA TCATCACCTC AAATTGCTCC ATCTTCAAAA TACTTGCAATC      180
TTATTTATTG ACCATATTCC TTCCACTTGG TTTATTGAAC TATTCCTCTC ATCATTCTCT      240
GATTTCACTG CAGCCAATG      259

```

(2) INFORMATION FOR SEQ ID NO:1059:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

```

GAAAAAACT ACTAACCCT GCAAGCTCTT GTCAAATTTT AGTTTAATTG GCATTGCTTG      60
TTTTTTGAAA CTGAAATTAC ATGAGTTTCA TTTTTCCTT GAATTTATAG GGTTTAGATT      120
TCTGAAAGCA GCATGAATAT ATCACCTAAC ATCCTGACAA TAAATCCAT CCGTTGTTTT      180

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TTTGTGTTGT TTGTTTTTC TTTTCCTTTA AGTAAGCTCT TTATTCATCT TATGGTGCAG 240
CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1060:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 103 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGCC TTCATGGCCT ACGAGAGTAT ATTGGTAGGG CTGGAATTTC TGGTTCATAT 60
GGTAACTAAC TCTATGTTGA ACATTTTGAG GAGCCCTCTC GAG 103

(2) INFORMATION FOR SEQ ID NO:1061:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 361 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

GAATTCGGCC TTCATGGCCT AAAAGGTTAG GCAATCACTG GGACCCGCAT GGTGTTCTCT 60
CAAAGAATAG GGTAAAGGAG AGCTGGGAGG GAGCCCTCTC CGTTGGGTGA CTCTTGTTGTG 120
CCCTTTAGAC AGGCTGGCCT GCCGGTTCCA CAGGGTACAG TTAGGACTTG AGTCCTTCTT 180
TTTCTGTTT GAGTTGGTGA GTGAGTGATA GGGTAACATG GGCCTTCAGG ATGACCCCTT 240
GGAAGTGTGC CGAGTTCCTT AAATCTCAGC TGGGATCCTG GACCTGGGAG GCCCCTGTGA 300
GGGCCAGCTC TGGAAAACC TGGGAGTTGA TGCCGGAGGC TGTGGAAGAA CTCTGCTCGA 360
G 361

(2) INFORMATION FOR SEQ ID NO:1062:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

GAATTCGGCC TTCATGGCCT AAGAAAAATT GGAACAAGC TAAGTGCCCA CATAGTTACA 60
AAAATTACGT TAAATAGATA CACGGTTGCT TTAAAGCTCC ACATACAGCA CCATAGAGCT 120
TTTTATATAT TTGTAGGCAT TAAAGCAATT CCAGGAAGGA TCTAAACCAA ACACTTGACC 180
CAGGTTGTCT CTCTGGGAG TGGAGCCACA TGGGATTTC CTGTTTCTGT ATTCTTATTA 240
CTTATATTAA AACACACATG AACAGAAGAA AAAATAGCCC CAGTATCTCG AG 292

(2) INFORMATION FOR SEQ ID NO:1063:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 331 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

GAATTCGGCC TTCATGGCCT ACCGTTGTGA CACTTCTGGA CACAAGTTGG GCCGAAGTAA	60
GCCAAGCCCA GTCCTTCCTG TTTCTTTCT CAGGAAATGT GACCACGTGC ACTGGGAAGC	120
TTTGTGTAAA GTAGATAGGG GTATGAGCCA ATTGCCCAGC ATTGGTGTGT TGTTTTGT	180
TTGTTTGTGT GTTTTCACAG AGTCTTGCCC TGTCACCCAG GCTGGAATGC AATGGCGTGA	240
TCTCAGCTTA CTGCAACCTC TGCCTCCCAG GTTCACACAA TTCACCTGCC TCAGCCGCCT	300
GAGTAGCTGT GATTACGGGC ACCGTCTCGA G	331

(2) INFORMATION FOR SEQ ID NO:1064:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 136 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

CGAGTGTTAC ATTCGTTCTT CCGCTCAAAT CCTGATCTGG TCCATTAAAG AGTGTTCGCA	60
GACAAAGTTT CTGAAAGATT AGAGAAGAAT CCCCCAAGAA TCAATTACAA CCAAATGGA	120
AAGGGACAAC CTCGAG	136

(2) INFORMATION FOR SEQ ID NO:1065:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

GAATTCGGCC TTCATGGCCT AGAATAAAGG AAAATTTCAGG TCATAGATTG AGTGCTATAT	60
TTGAAGTAAA TACAGACCTT CAAAAAATA TAATATCAAA AATCACTGCT GAGCTCTCCT	120
GGCCTTCCAT ACTTAGCTCA CCCCAGCACT TGAAATTCC ACTTACTAAT ACAAACCTGCT	180
CCTCAGAAGA AGAGATTACT TTAGAAAATC CTGCAGATGT TCCTGTCTAT GTTCAGTTTA	240
TTCTCTGGC TCGAG	255

(2) INFORMATION FOR SEQ ID NO:1066:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 379 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

GAATTCGGCC	TTCATGGCCT	ACAACCTGCT	TTCCACCTTC	TGTAATCTCC	CATCAGTGAT	60
AAATTACCCA	TCAGCTTTCC	AGATTCCAGA	ATTTTGCTGA	CATCTCCTGT	TGGCTATGTT	120
CTTATTTCTT	TTTCTGTTTA	TTCTGTGAC	CTTGTGCCCT	TTAATTCTTT	CCCATAATT	180
GTTGGGACTT	CAGAAGGAAG	TGGAGCTAAA	GGCATGTGTC	TGCCTGCCCC	ATCTTGGCTG	240
GAAGTTGGGA	AGGCCTTCCT	TCCAAGGCAC	CCAGCATAGC	ACCTGGCACA	TGATGGATGC	300
TCAGCAAATG	TCTGTGGGTC	TTCTTTTAC	TAAACAGGCA	GTTGATTTC	CCAGAAGTAG	360
TGACCACCTA	AGTCTCGAG					379

(2) INFORMATION FOR SEQ ID NO:1067:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

GAATTCGGCC	TTCATGGCCT	AACACAGCTC	ACATCAGAAT	ATAATAGTGG	AACTAGGGTG	60
ACTTCACTCC	CTTTCACCTG	ATGTCTATCT	TGGCCTTTTA	GCACCTTGAC	TATCCCTGAA	120
AAGACTGGGT	CTTTGTTTTC	CCAGGGAAAA	AACGAAGTGA	TGTAGATCTA	AGAAATAGTG	180
CCTCTTTAAT	ATTTAATTCT	TACATGACAA	CTAACACACA	GGGAAAAGGC	TATGTTAAGT	240
TGATTATAGC	TCCTCTTAAA	ATGTCCTATG	CTGTCAGTTG	GTCTTAGAGA	CATGGGAATA	300
ACCAAGCAAT	CTCGAG					316

(2) INFORMATION FOR SEQ ID NO:1068:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

CGGATTGAAT	TCTAGACCTC	ACCTCTGATC	TATCTCTTTT	ACCTCAGCAA	TTTATTTCCC	60
AATTATTATA	TCTACTTTAT	TGTTCTTATG	AGACAATAGA	CTATGATAAT	TTTCCAGAAA	120
TAATTTTGTT	TTCTTCCTCC	CATCTTCTAA	TGTTGAGACC	GTTTCTCTGT	TTTCTTTCAT	180
CTCTACCCCT	CAGTCTCATA	GGTTTATTTC	TCAATTCCAA	TCCAGCGATT	TCAAAACCTG	240
TACAACAAAC	CAACTCAGCA	GCCCTTGCA	ACTTGAGGAG	ATTTCACAAA	CCACTCGAG	299

(2) INFORMATION FOR SEQ ID NO:1069:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

```

GAATTCGGCC TTCATGGCCT ACCATTTCCTA CAACCATTTT AATCTGCGCA TCGGTCCCAG      60
ACGTAGGGAT TCCTCGTCTC ATCTTGGAAG CATTGCCAGC AGTGGTTCTG ATTTGGAAGC      120
CTGCGTCTGT CACGTGACAC CGTCTGAGCC TGTGCCTGCC TCTCTTTCTT CCGGCAGTGC      180
CCTGTACTCT GTGGGGATGA CGGCAGTGGG CCTGGCCATC CTGTGGTATG TTTTCCGTCT      240
GGCCGGGAGA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1070:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

```

GAATTCGGCC TTCATGGCCT AGCCATCATG TTTATTAGAA GGTTGGATT TGGTGTGTGC      60
TCTAGACAGA TACAGAATAA ATACCTGCGC CTGAGAACA GGAAGTCCAC GATTCATACA      120
AAGTGCTCAC TACAGGAAGT TGCTGTGTCA AAATCCAGGC AAGGACCCAA CTCGGGGCAG      180
CCCCTCCTCC CTGCTGACCT CAACAAGGGC TGTGCTATTG TTTTATTATT TATTATTTTA      240
TTTCTCTTTA TTATTATTAA TATTATTATT ATTTGCTTTT GCTGTGGTCA CTATCATTGG      300
CAAAGTTCCT TTTCCCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:1071:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```

GAATTCGGCC TTCATGGCCT AGGGAGGTAT TTGTCATTGT GAAAAGCTGG GAATCTCAAA      60
CATAGTCAAC TTAATAAAA AGAAGCTAAT ACAGGTTGAG CATTCTTAAT CCAAAAATCC      120
AGAATCCAAA TTGCTCCAAA ATCTGAAACT TTCTGAATGC TGACCTGATA CTACAAGTAG      180
AAAATTCCAC ATACAAGTAC TTAACACAAA CTTTGTTCAT TGCACAAACT ACTAAAAATA      240
TTGTATAAAA TTAACCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:1072:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```

GAATTCGGCC TTCATGGCCT ACTTGGGCTC ATTTATTGTT GTGAATTTGA TCCTGGCTGT      60
GGTGGCCATG GCCTATGAGG AGCAGAATCA GGCCACCTTG GAAGAAGCAG AACAAAAAGA      120
GGCCGAATTT CAGCAGATGC TCGAACAGCT TAAAAAGCAA CAGGAAGAAG CTCAGGCAGT      180
TGCGGCAGCA TCAGCTGCTT CAAGAGATTT CAGTGAATA GGTGGGTTAG GAGAGCTGTT      240

```

GGAAAGTTCT TCAGAAGCAT CAAAGTTGAG TTCCAAAAGT GCTAAAGAAT GGAGGTCCTCCT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:1073:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

GAATTCGGCC TTCATGGCCT AAAAAAGCTA ATGTCATAGG TCTTTATATG TGGGCAGGGT 60
TTATAAGTTG TCTPAAAGGGC CATCAGGTAG AGTTGGCCTT TTCTGTTGAG GTCCCCTAAA 120
TTTCAGTGGA GGTCTTCTCT TTGGGGCCAG TTTCTCTAGA AAAGTGGGTC CTGATAGTAG 180
GGTAAGAAAA GACAGCTGAG GACCCCAAGA TTTGTATGAT GACTTTTACT TAATCCCTCT 240
ATCTTCATCC TCTCTCATGC CCATCCGGCC CCACCCCCCA AATCCTCCTC TGGCTGCTGA 300
CCCTCAGGTT CAGTTTTTCC TGTCAAGTGA GGTGAGGGT GGGGCGTAGG CTGGCTGTGG 360
AGAGTAGGGG AGAGGACCTG GGTCCAGTA GCTCGAG 397

(2) INFORMATION FOR SEQ ID NO:1074:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

GCGATTGAAT TCTAGACCTG CACCACTGCG ATCCCTACGC CTGAGGAAAT GACAAGATTG 60
AGAAGCATGA ACAGACAACCT CCAGATAAAT GTTGACTGTA CACTGAAAGA AGTTGACCTC 120
CTTCAATCTA GAGGAAACTT TGATCCAAA GCCATGAATA ATTTTATGA CAACATAGAA 180
CCTGGCCAG TTGTACCACC CAAGCCATCT AAAAAAGACT CCTCAGACCC CTGCACAATT 240
GAGAGAAAAG CCCGAAGAAT TAGCGTGACC TCCAAAGTAC AGGCAGACAT CCATGACACC 300
CATCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:1075:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

GAATTCGGCC TTCATGGCCT AGAAAACTAA ACATTTGCCT TTTATAAAGA CTGACAAAAT 60
ATAAATCTTT ATTCTAACC TATCCCCAAA ACTAGCCAGG CCACACCCCA GATGTTCTTA 120
TTGACTATTG GGAAGATAGA AAAGGCGTTG TGTTTTTGT TTTTGTGTTG TTGTTGTCAT 180
TGTGTTTTT TCAGAAGACC AGTGTCTCAG TTCTGTCTTA GTAGTACCAC ACCCAGACTC 240
GAG 243

(2) INFORMATION FOR SEQ ID NO:1076:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```

CTCGAGCTGG GGGCCACTTT GGCACCTAAC AAAACCAGAG AAAACAAGTG CAACTAAGCA      60
AGCAACTATG CACATTCCAG ACATAAGAT CATTAAATAA CGCCTTAATC TAAGGATCTG      120
TTGGTTCTAA CGCCAGAAAA AGAAGTTAAA TTTTAAAAAA TATCTAAAAG AGATTTTAAG      180
TGGGCAAGCA ATAGAGAAGA TACCAACAC TGAGAAACGG AAAGGAAAAA AGACCACCTT      240
AATACTACT GCTCATCAAT ATACATCTAT AATTCTACCA GAACAGTATT AGAAATGAG      300
AAACGCCAAT ATTACATAAA ATAAGGTAAA AATAACTAAG CATAGGTTAG TGTCAGGGGA      360
CCTAGGGTTC AGACACCCAG AGTTTATAT AAGGATAATT TGTCTGAAT CAAGACCACA      420
CTGTCCTCTC CTTAAACCTA ACTGCTACAA GCAGACACCA CCTCTTCTGA CTGGGCTGAA      480
GTGTGGGAAA CAGTCCAAAA ATTAGGTATC ACACCATAAA CCCTCCCAA GAGCAACCTT      540
TGCTCTCAAT TAAGTTGTTG ACAAATAAT TCTCAACTTG CCTAGGCTG CCGAATTC      598

```

(2) INFORMATION FOR SEQ ID NO:1077:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

```

GAATTCGGCC AAAGAGGCCT AGGTGGGTAT TTGAATGGTT TTGCTCCAA ATTGAACCTCA      60
CATTGTTGAT ATGACATGAA ACTAGCTGCA GCAAAAAATC CAGATACAGT AGATGAAAAG      120
ACTTGCTTTT CAGGAGGCAG CTGGTTGCCA TTTAAAAAGA AGATCATTTG CTTTTCATTC      180
AAGTCTAACA GAAATCCTAC TGTATCTCCT TCTTCCAGC ATGGGTGTAT GTGAGGCTTA      240
CTTCTGGCAT TGTACCAAAT CAGCTGCCGG CAGCCATCAT ACGCACAGGA GTATTTCATCA      300
TCCCAATGC CGTAGCCTTC ATGATTGAGG AATTGCTGT CTCGAG      346

```

(2) INFORMATION FOR SEQ ID NO:1078:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

```

GAATTCGGCC AAAGAGCCTA GTCCTGTGA CCATTATTAT TATTCATACT CATATTCATT      60
ACTTCTAACT TCAAGTGGGC CATTAGCACT AACTGGCATA CCACACTTCT CTAGTCTATT      120
TATTCTCCTT GATGACTATT TCATACCCTT CCCTCTTCC CCAAACTTCC AACACCTCCT      180
CTTCCCATCA TTCTCAGCTG ACGGCCTTGC TTTCTCCCAT GATTGGGACT AGAGAAGCAA      240
TTTGTAGGGA ATTTCCACAA GCTCCATCAC ATGTGGCCAC TCATCTACAT CTGGATCCAT      300

```


CTATTTGGCC TTCCCTATTG TTCTTATACA CTCTCCCTGT CTTACTTTAT CTAAGGTCAA 360
CATCTCCACT CCATTATGC ACTAGATCCT GGCATTACAC CAGCAATCCT CACCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGCTTATTCT TTTTCTTTT TCTTTTTTT TTTTTTTTC 60
GAGACAGGGT CTTTCTTTGT CACCACAGGC TGCAGTGAG TGTGTGATC ATAGCTCACT 120
GCAGCCCTCA ACTCCAGGCC TCAAATGATC CTTCTGACTC AGCCTGCTGA ATGACTGACA 180
TTACACGTGC ATGCCGCTGT GCCCAGCTAA TTTTAAATT TTTGTAGAG ATGAGGTCTT 240
GCTTTGTTGC CCAGACTCGA G 261

(2) INFORMATION FOR SEQ ID NO:1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 208 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GAATTCGGCC TTCATGGCCT ACATTAACAG ATTAATCCAT CTGTATAGGG CTTTGTCTGT 60
TGGATAGAAT TTAAATTGTC TACATAAATA TTTGTTTTAG GACCCCTAGA TTTTATCTGA 120
ATACACAGAT TAGGCTTTAA AACAGATAT ATATGTCATT TTTGGCTTAA GGAGTTTGGC 180
TAAGTTAGCT TTTCAACTGG TTCTCGAG 208

(2) INFORMATION FOR SEQ ID NO:1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GAATTCGGCC TTCATGACTC CTGATTTCAGG GGTTCAGTTTA CTTTAAAAA AATCATTAGA 60
AAAGGAAGAA TTATGCCAAA GACTTAAAGA ACAGTTAGAT GCTCTTGAAA AAGAACTGC 120
ATCTAAGCTG TCAGAAATGG ATTCTTTTAA CAATCAACTA AAGGAACTGA GAGAAACCTA 180
CAACACACAG CAGTTAGCCC TTGAACAGCT TTATAAGATC AAACGTGACA AGTTGAAGGA 240
AATTGAAAGG AAAAGATTAG AACTAATGCA GAAAAAGAAA CTAGAAGATG AGGCTGCAAG 300
GAAAGCAAAG CAAGGAAAAG AAACTTATG GAAAGAAAAT CTTAGAANGG AGGAAGAAGA 360
AAAACAAAAG CGACTCCAGG AAGCCAAGAC ACCAGNAAAA ATTCCAAGAA GAGGAACGTC 420
TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

```

GAATTCGGCC TTCATGGCCT AAGACTTCTT GCAGGAAAAA TGAGTGCATT GAGGATAGTA      60
ACCTGACTTT CTGACCTGTG ATTAAATTAT GATAGTAGTC AGTCATTTTA CTCTCCCAGG      120
GTTTGAGGAA GTGGCCGGTG AGGACTTGA GCCTAGTGAG GAGTTAGTAG AGCTGCCCAG      180
GGTGGAGGAG GCCACAGAGG ACAGCCCTGG TGAAGAGAAC AGTGAGGCCT TGGATGTGTT      240
GATATCCAGC AAGGACCTGG CACTGTCTAG TGAGGACGAG GCCTGCACAG GATCTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

```

GAATTCGGCC TTCATGGCCT AAGTCACTTG TGTAACGTAG TTATACTTGT CTGCATTNTA      60
ATTAACCTTC AACAGCTATT AAAGTGAAT GTAAGTTAAA TTTTGAAGGA AAGGAAATAA      120
ATGTTTTCCA TATTTCGTCT TGATTACTT TCTGTATGAG AACAGCTGTG TTTTGTATAG      180
GTTTATGGTT TGCATGAGTT CATATTTAAA GTGATCCAGG CCAATGCATG GCTATTGCTG      240
TAAATCTTGA TGTTTATTTT TGCCTTGTA AGTTCTATCA CGGCCTACCT GGAATTTAAA      300
ATTCACTAGA CAAATTAATT GGTCTCTGCG ACAAATTTT TAATAAGTAG ATTATTTTAC      360
AAAGAAATTT GAACAAATTT AATTGAATCT TTTGTTTAGC TTGCCTCTAA GAACTTTCT      420
TAATAAGCT CCCAAACACT CGAG                                         444

```

(2) INFORMATION FOR SEQ ID NO:1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

```

GAGTGAGACT CCCTCTCAAA GGAAAAAAA AAGTTTTCTA GGATCAAAAT AGGAAAACAG      60
TTGTTTCAGA ACTCATGATA TGAGTCATGA CTACAACCCA CCATATTGAG TAAAACTCA      120
CCTTGTCCTG TTGTCTGACA TTAAGTGTTT TACGAGATCC ATACCTGTGA AATCAGCTCC      180
TCTGGAATGA CAGATGCTGG AATAACTGGC TGGGGCTGAC TGCCCAAAAG CCCAGACCTT      240
CGATCCCGTC CTGTCCGAAT AACTCGAG                                         268

```

(2) INFORMATION FOR SEQ ID NO:1085:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

```

GAATTCGGCC TTCATGGCCT ACTTTAAGTG AACAAACANCA ACAAAAAAGT TAAGGGTAAG      60
ATGAGGCAGC TTTTCAGTGG AAAATACTTG TCTTGGGGAC AGTATGTCAT GTCCCTATAC      120
CTGGTGCCAT TGATAAGGTT ATTCATTCAA CAATATTAC TGATCACTGG CATATGCCAA      180
GCACTCTGCC AAGTACTAGG GATATAACA TTAGAAAGAC AAGTTCCTCC CTTTTCAGTC      240
ACGATCTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:1086:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

```

GAATTCGGCC TTCATGGCCT AGAGCTTCAC GGAGGCAAGA GGGTAATGGA GTGCCTAAAA      60
AAAGCTCTAA AAATAGCAAA TCAGTGTCATG GACCCCTCTC TACAAGTGCA GCTTTTATA      120
GAAATTCTGA ACAGATATAT CTATTTTAT GAAAAGGAAA ATGATGCGGT AACAATTGAG      180
GTTTAAACC AGCTTATCCA AAAGATTCGA GAAGACCTCC CGAATCTTGA ATCCAGTGAA      240
GAAACAGAGC AACTCGAG                                     258

```

(2) INFORMATION FOR SEQ ID NO:1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

```

GAATTCGGCC TTCATGGCCT AATAAAAAGA ATTATCAAAG AATTGCAGGG GAAACCCCAT      60
AGAGAAGACT CATTCTTAGA TGAGTATACA ATCCATGGGG GTCTTTAGGA TATTAACTG      120
ATTTGGGAGA GGTCCGATAA AGAAAAAGGA GCATTAACTT TGACTATGCC TTTAGCTCCA      180
GCCGCCTCTT TAAGAGGAAA TTGTGGGGCA GGTGGGGGAA GGCTAGTCAT GGAACGAAAC      240
TGTAAGCCAG ATCGGGTGTG AGGAGGGGAG GTGATAAAG GATTATAGGG TGGGAGAGCA      300
CAGGCTGAGG AAGAATTGGG ACCTGGCTCA GCCTGGCAAG GCACAGCCTG GGGAGGAGGG      360
GAGAGGTCCT GTAGAAAAGG AGGATCTCGA G                                     391

```

(2) INFORMATION FOR SEQ ID NO:1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAATTCGGCC TTCATGGCCT AGCCTTCNAA GTTTGAATGG CCCTTAGGTT TTAAGTTATC	60
TATGCAAAGA TGAANAAGGC CTTCACATTC TCAAAGGTGA CAACTCATAC CCAGCCATTT	120
GCTTATTTT GCCTGCAGAC CTCCAATGGA AGTCCGGGCA CATGGCGGAG AGCCTCACCA	180
ACATGCCACG GCACTCCCTC TACATCATCA TTGGAGCCCT CTGCGTGGCC TTCATCCTTA	240
TGCTGATCAT CCTGATCGTG GGGATTGGCC GCATCAGCCG CATTGAATAC CAGGGTTCTT	300
CCAGGCCAGC CTATGAGGAG TTCTACAAC TCCGCAGCAT CGACAGCGAG TTCAGCAATG	360
CACTCGAG	368

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 409 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCGGCC TTATGGCCTA GTTCATTAA CTAATACTTG TATTAAATCA CTTCTAAATG	60
CTTATTATAC CCTGTATTAT AGTATTATAT TCTGAGTCTT AAAGGTGCTT AATGTGAAGA	120
TTCTCTCTCT ACATATTCAA CTCTTACTAA CTTTGGCTT TAGGTAGAAA TCAGTTAGTG	180
TATTATATGA TAAATAGGA AACTATTTC CTAGGGGTAT AGGTATTGAG TAGGGAGCTT	240
TGGAGTCTCA ATGAGCTTCT TAAAGAAGCA TTTTAAATGG TAGGTTTATG GGAGAGTTT	300
TGTAGTAAGA TAAAGTAGAT GAGAAAGTGT TGCCTCTAAA CAATCAACAA GCTGGGAATG	360
GGGTGCAGAA TGAGGAGAAC CCTAAGCAAT AGGCAATAAG AAGCTCGAG	409

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 359 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GAATTCGGCC TTGGCCTAGT GAGAGAGCGT CAAAAAACT TCCATCTCAG CCAACCACTG	60
ATACTAGTAC TGACAAAGAA AGAACTTCAG AGGACATGGC TGATAAAGAA AAATCTACAG	120
CTGACTCTGG AGGTGAAGGA CTGGAAACAG CCCCAAGTC TGAAGAGTTC AGCGACCTCC	180
CCTGTCCAGT CGAAGAAATT AAAAATTACA CAAAAGAGCA TAATAATTTA ATTCTGCTAA	240
ATAAGGATGT TCAACAGGAA AGCAGTGAGC AAAAAATAA ATCAACAGAC AAAGGTGAAA	300
AGAAGCCAGA CAGCAATGAG AAAGGAGAAA GAAAGAAAGA AAAGAAGGAA AAGCTCGAG	359

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 280 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GAATTCGGCC	TTCATGGCCT	ACATGTTT	ACAT	TCTAAGAAAC	TTAACTCCAT	TTTAAAGCTT	60
TAAGATTCCC	CCGATCCCAA	ATAACCTAAC	ACACCAAAAG	CCTTGCCATT	TCACACATGC		120
TGTTCTTTT	CTTAGAACCT	TTTCAATGTC	TAGCTCACTC	TGTTTGGGAC	TTCTTTTTC		180
TTTTCTTTT	TTTGAGACAG	GGTCTGGCTC	TGTCATCCAG	GCTGGAGTGC	AATGGGGCAA		240
TTTCGGCTCA	CTGCAACCTC	CGCCCTTCCA	GGCTCAAGCG				280

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 443 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GGAAAATTGA	GAAGAACATG	AAAGAAAAAG	AAGAACTGTT	AAAGTTAATT	GCCGTTCTGG	60
AAAAAGAAAC	AGCACAACTT	CGAGAACAAG	TTGGGAGAAT	GGAAAGAGAA	CTTAACCATG	120
AGAAAGAAAG	ATGTGACCAA	CTGCAAGCAG	AACAAAAGGG	TCTTACTGAA	GTAACACAAA	180
GCTTAAAAAT	GGAAAATGAA	GAGTTTAAGA	AGAGGTTTCA	TGATGCTACA	TCCAAAGCCC	240
ATCAGCTTGA	GGAAGATATT	GTGTCAGTAA	CACATAAAGC	AATTGAAAAA	GAAACCGAAT	300
TAGACAGTTT	AAAGGACAAA	CTCAAGAAGG	CACAACATGA	AAGAGAACAA	CTTGAATGTC	360
AGTTGAAGAC	AGAGAAGGAT	GAAAAGGAAC	TTTATAAGGT	ACATTGGAAG	AATACAGAAA	420
TAGAAAATAC	CAAGCTTCTC	GAG				443

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 256 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC	TTCATGGCCT	ACCTCCATTG	TATATTAACA	TTTATCATAA	TTATTATTG	60
CTCATTCAAA	AAATATTGCT	CTGATATGGT	ATTGAATATT	CCTCACATAG	GAAAATATGA	120
ACAGTTTATT	TGCCACCCAG	ATGGTTTGGA	AGCCTATACC	CTCCAAGACA	TTGAGAAAAG	180
AAAAATCTTT	CTCTCAGGAG	AGAGAATGAG	TGCCAAGCAA	TGGGAGAAGC	CCCTTAAAAA	240
ACCATCAGAT	CTCGAG					256

(2) INFORMATION FOR SEQ ID NO:1094:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 454 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

GAATTCGGCC	TTCATGGCCT	AAGCTGTTAG	TGATTCTGAC	ACCCTTGGAC	CTCCAGGAGT	60
AGCTCCTCCT	GCCACGAGAG	GACTCTGGCT	TTTCTAATAA	GGAAGGTTCT	GGCCAATCAG	120
TCCAAGAAAG	GCCCGGATTG	TCTTCCAAGG	TGTTGTCTCT	GCAGAAATGT	TCCTCAGGGT	180
GGAAGGTGCT	GCTGCAGCAA	GGGATGTCCC	CTGAGTTTTC	AGGTATGTAG	TCTGTGGCTG	240
CAGCAGGTGA	ACACTCCTCA	CACTCCCAT	TCTTACTGTT	AGATCTAAGA	GAGGAGCAGT	300
CCCTGTGGGT	TCCGTGGGAT	CCGCATGTAG	CACACAGAA	TGAGGCACCAC	CTCCCTTCAT	360
CCTCAAAGCT	GTCTCTGCCT	TGTTCATACA	GACAGATGGG	GGCATCACAG	TGCTGATAGC	420
GCTGATATAA	GTCTGAGAAA	GCCCCTGGCT	CGAG			454

(2) INFORMATION FOR SEQ ID NO:1095:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

GAATTCGGCC	TTCATGGCCT	AGTGATCTCA	TCTCTCCGTC	CATGGGCGAA	AAAACAGCCA	60
TCACCAGGCC	ATTACGCTT	TGTGCTTTTG	TTAGCAGAGC	CCAGGCAGCC	CTGCAGCCCA	120
CATCTAGGGT	ACAAACGGAA	CGGCGCGGTT	TTCTTGTAT	CATTAGAGG	AAATTTTGA	180
GCTGAACAGT	ATTTTTC	TCCCTCTCTC	TCTCTCTGAA	ATATTGCTGA	GATTTAAAGG	240
AGGACGAAGA	CAACAGATTC	ATAGCTGGGT	CTTGCTGTTT	TCCTGACGCT	GACCACAGCG	300
GATCTAGTTT	CTCTGCAGAA	GACAGCAAGA	TGCCCCAGGG	AATGTTTGTG	AAAAAGGATG	360
ACTGGATGGG	AAGCAAGCTG	AAGAAAAAGA	AGGAAAGAAA	GAGAGAAATC	AGTAAATCAC	420
CACACAAGAG	GTGGAGAAGA	GGAATCGAG				449

(2) INFORMATION FOR SEQ ID NO:1096:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 166 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

GACTGGCCGC	AAGGGACGGG	TTGTGAGCAA	TGATGATGGA	AGCATATCTT	ATGAGTCAAG	60
ATCTGAACTT	GATGTGCCTG	TGGAAATACT	AAACATCACA	GAAAAACAAC	GATTTATGGA	120
TGGAGATAAG	AATATTGCTA	TCATCTCAGA	AGCTGCCATG	CTCGAG		166

(2) INFORMATION FOR SEQ ID NO:1097:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

GAATTCGGCC	TTCATGGCCT	ACATTATTTA	CACCTGTCCC	AGACTTTGAT	TCAGGAACTA	60
ATGCTGCAAA	GCAAGGACTA	TGATGGAAAA	TGCTCACTGC	AAGAATGGTA	GCTGCAGCAA	120
GATCAAGATC	CCAGAAAGCA	GTGGCCAAGG	CACTCACTGT	AGACTTTAGT	GCCTGCAGCA	180
TCTGGTGCAA	GCTACACTGT	CTACGCCCAG	GAACACAGCA	GCAGCATCCG	GCCTGGGCCA	240
ATTCTGTGTA	AGATTTGATG	CGCTGTCCCT	GGCTGCAGTG	CCTGCAGACA	TCTCTCTCTA	300
GCCCTTCTAA	CAATTTTACA	GCAACTCAAC	ATCTTTAAAA	ATTATTAGC	CAACCAAAAT	360
CAGCTTCTGT	GGCATGCAAG	TAAAAACCA	GGCTGATATG	TCTGAATACA	GAAGATTTAT	420
ATTAGTTCCT	TAGAGTCAAT	AATCCATACA	GACTCTATT	C		480
TAAGAATTCC	TCTGCCTCGA	G				501

(2) INFORMATION FOR SEQ ID NO:1098:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

GAATTCGGCC	TTCATGGCCT	ACTTCAAAAA	CATATATTAA	TATTTTGTGA	CCACGTAAGT	60
TCATCAGAAG	CCTGACTTTA	ATCTCTGATT	TATTATATTT	GAACACTGTG	AAGAAGCAGT	120
TTAACTACTGA	ACGAAAGTGT	CGTAATGCAG	CTTTCAAGT	GGCCATTAAA	GACAGATCTC	180
TGCTTTTCTA	TTAGTACATT	TTCTAAGATG	ACTATCATTG	CCATTGTAGT	CAGCTTTGTG	240
TACCTTTATA	GAGATTCCAG	TATAAACCCA	GAAACGCTCG	AG		282

(2) INFORMATION FOR SEQ ID NO:1099:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

GAATTCGGCC	TTCATGGCCT	AGGAAACTTT	TCAAAGAAGT	AGTCCACGAG	AACTACCTTG	60
AAAGAGCAAA	ACCAGCCAGG	TGCAGTGGCT	CACGCCCATA	ATCCCAGCAC	TCTGGGAGGC	120
CCAGGTGGGT	GGATCTCGTG	AGGTCAGGAG	TTCAAGACCA	GCTTGGCCAA	CATGGTGAAA	180
CCCCATCTCT	GCTGAAAATA	CAAAAGTTAG	CTGAAAATAC	AAAAGTGGCA	CATGCCTGTA	240
ATGCCAGCTA	CCGGGAAAGG	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:1100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

```

CTCGAGCGTA TCCCAGAACT TAAAGTATAA TAATAATAAT AATAATAATA ATAATAATAA    60
TAATAAAACC TTCCAACAAG CTTCTTTTCC ACCACAGGAA ATCCTGTTGG GAGTTCCCCC    120
TGAACCAAAA AAAAAAAG ATAGAGTATA AAACATACAC TTTTCAGGAA TGCTTATTGG    180
GTAATGTAAG ATAACACCTC AAAATGAAAC TCAGAATTTT ATTTTATTTT ATTTTTTGAG    240
ATGGAGTCTC ACCTAGGCTG GAGTTCAGTG TGGTAATCTT GGCTCACTGT AGGCCATGAA    300
GGCCGAATTC                                     310

```

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTGT ACCTCATTCT GCCATCTCTG ATATTATGTC    60
ATCTGATCAA GAAACTTACT CTTGTAAACC TCATGGACGG ACTCCACTTA CCTCAGCTGA    120
TGAGCATGTA CATTCCAAAC TGGAAGGAAG TAAAGTAACG AAATCTAAGA CTTCTCCGGT    180
GGTATCTGGT TCATCTAGTA AATCAACCAC CCTTCCAAGG CCACGACCTA CCAGGACTTC    240
CCTCTTGC GC AGAGCACGAC TTGGTGAAGC TTCAGACAGT GAACTTGCTG ATGCTGACAA    300
AGCATCTGTT GCTTCTGAAG TATCCACAAC AAGTTCTACA TCAAAACCTC CCACAGGAAG    360
GCTCGAG                                     367

```

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

```

GAATTCGGCC TTCATGGCCT AAGAAAGCAA GAAAGCACGA AAGCAATCAA GCAAGAAAGC    60
AAGCAGGAAA GAAACAAAAG AAAGAAAGAA NGCGAGAAAA CAAGAAAGCA CGAAAGCAAG    120
CAAGCAAGAA AGCAAGCAAG AAAGAAACAA AAGAAAGAAA GAAAGAAAGN AAACAGGAAA    180
GCAAGAAAGC ACGAAAGCAA GCNAGCAAGC AAGAAAGCAA GCAAGAAAGA AACAAAAGAA    240
AGAAAGAAAG AAAGAAAGAA AAAGAAAACA GGAAAGCAAG AAAGCACGAA AGCAAGCAAG    300
CAAGCAAGAA AGCAAGCATG AAAGAAACGA AAGAAAGAAA GAAAGCAAGA AAACGGGAAA    360
GACTCGAG                                     368

```

(2) INFORMATION FOR SEQ ID NO:1103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:


```

GAATTCGGCC TTCTGGCCTA GAAACCCGTG ACACACACAC ACACACCTGC ATAGATTTT 60
CCCAAGCACA CGATATGCAC GTGGATACAC AGACTTACAA GCACAGGGCC ACGTGCAGAC 120
AGACACAGAC CCTGTCTGCA CCACAAACAT ACCACACACA GCCACACACA CAGAAGCCAA 180
ACATCCTCGC ATAGGTGGAT ACAAGCACAG ACTCACATAC ACATATGCGA TACACATATG 240
GATACATACA CAGAGTACCC CCACAAACAC ACAGACACAC ACGGGCAGAG ACAGACAGAG 300
ACAGGCACAG ACCCCCCCCC ACCTCGAG 328

```

(2) INFORMATION FOR SEQ ID NO:1104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

```

GAAAAAACT GAGTTAATGG CCATGACTAG ATGGGAGGTC AGATTCGCCG TTATATCCTC 60
TCTGTTTTCG AGTTTAGACA CAACTGACCA GCATTGTTAA AATGGAGATC ATACGGCTGG 120
TAGAACAGAC TCTTTGTGGC CAAAATTAG CAAATTATAA ATAGAATCTA AAGCCATCCC 180
AGGCAAGGGT TAAGTTATGC ACCCTACAC TTAAAGAATA AACTATGTTG GCCGGGCCAA 240
CTCGAG 246

```

(2) INFORMATION FOR SEQ ID NO:1105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

```

GAATTCGGCC TTCATGGCCT ACGATCAGAA AGAAAACACA GATCTCGAAG TCGGGATCGA 60
AGAAGATCAA AAAGCCGGGA TCGAAAGTCA TATAAGCACA GGAGCAAAAG TCGGGACAGA 120
GAACAAGATA GAAAATCCAA GGAGAAAGAA AAGAGGGGAT CTGATGATAA AAAAAGTAGA 180
GAAAGAAGGC GGAGCAGAAG TAGAGATCGA CGAAGAAGCA GAAGCCATGA TCGATCAGAA 240
AGAAAACACA GATCTCGAAG TCGGGATCGA AGAAGATCAA AAAGCCGGGA AGCTCGAG 298

```

(2) INFORMATION FOR SEQ ID NO:1106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

GAATTCGGCC AAAGAGGCCT AGGGATGGAT GGTTGAGCTG CTAGAATTC GATGCAGGAC 60
TTCTTCAAAA TTGAGTGGAT GATGCCTTGC AGAGCCTGAA AGCCGTCATT CACGGGAAAC 120
ACATGATCCT TACTGTCCGC AATCCGGGCC AGCTGTGTCT CATTGAAATC TTTCACACCA 180
ACACAGTAAA CAATTGCACC AAGATCTCGA G 211

```

(2) INFORMATION FOR SEQ ID NO:1107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

```

GAATTCGGCC AAAGAGGCCT ACCTGCTTGA ATTGGGGCCC CTTGTGAAGC TGCTGCCGCA      60
TCTCTTCCAT TCGCTGCTTC CGGTACTGCT GCAGAAACTC TTCATCATCT TGGTCCTCAT      120
TCATTATGGC AAATCCTTC AGAGTCATCT TCCCACTGAT CTTCTCCTGG AGGTCTTTCT      180
GTTTCTGTTG CTCCTCCTCT TCATCCAGAT GGGACCTGCA AGTCATTGAC AGCTTCTTGA      240
TCAGCCTTTC CATCTCCCGG CAACTCGAG                                         269

```

(2) INFORMATION FOR SEQ ID NO:1108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 133 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

```

GAATTCGGCC AAAGAGGCCT ATGAAAATTG ACTGCAATTA GTAAAGTTGG TATAACGTAC      60
GTTCCCAAGTT GTGCTATTTA GAATTATGAT AGTATTATGC TCCTACTTTT CTTTGATATT      120
GAGTAGTCTC GAG                                                         133

```

(2) INFORMATION FOR SEQ ID NO:1109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

```

GAATTCGGCC AAAGAGGCCT AGCTTTTCT AATCATAAAT TATATGACCT TTACAGAAAA      60
TTTAGAAAAT ACAGAAAAC TGAAAAGTTA CACATGGTAC AACTCACAAC CACAATCCTC      120
GAG                                                                      123

```

(2) INFORMATION FOR SEQ ID NO:1110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

```

GAATTCGGCC AAAGAGGCCT AGTGTTCAG ATCCTACGGC TTATGAGGAT TTTCCGAATT      60
CTAAAGCTTG CCCGGCACTC GGTAGGACTT CGGTCTCTAG GTGCCACACT GAGACACAGC      120
TACCATGAAG TTGGGCTTCT GCTTCTCTTC CTCTCTGTGG GCATTTCAT TTTCTCTGTG      180
CTTATCTACT CCGTGGAGAA AGATGACCAC ACATCCAGCC TCACCAGCAT CCCCCTCGAG      240

```

(2) INFORMATION FOR SEQ ID NO:1111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

```

GAATTCGGCC AAAGAGGCCT AGGTGGGGAG GGGAGGGGAC AGGAGAAATG AAATACCTTC      60
ACCGAGAACT CAGCAGCTGC CACCGCAGCT GCCTCCTCAG GATCCGGTCG TCGGGGATAG      120
GGAAGGGAGG GGAAAGGGGA ACGGAAAACA AAAAAAGGG GGAGGGAAGG GGGAGGAAGG      180
AGTCGGGGAC GGCCTCAAC TCAGCTCAGA GGAGTCGCTG CTGCAGCCGC CACTCGGTAC      240
CCGCTGCTAG GCCTCTTTCG CGAG      264

```

(2) INFORMATION FOR SEQ ID NO:1112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 519 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

```

GAATTCGGCC AAAGAGGCCT AAATATTAGA AAATGTATAT TATAGAACAT GATATATATT      60
TACATTCATC TCTGTATTCT CTCAGCTGTT GTTAGAAGGA CAGAATGTTA AACTTTATCT      120
TAATTAGTAT ACTAGAAAGG GCAGTATAAT ACTGTTTAA AGTGAAGGCA TGAAGTAAAC      180
TAAAATATTT CATAAGGCTT AGCTAGAGGC AGAGTAACGT GTTTTGTTC ATTGGGCTTC      240
CTTGACTTGA GTTTTTCAT TTAATAATC AAACCAACAC TTTTAAAAA ATAATTCAGA      300
TGAGACTGAG CCATATCTGC AGTAAGAGAA ATATTCTTGA ATGTTTGGT TACTTATGAT      360
AGAGTACTTT TCTTGATACT GTTAACCTTG TGCTTTTAA AAAAAGTGAT TCTCTAACAG      420
ACCTCTTAAA TTGTGACATG AAGGTATGTA ATTAGATTTC AGAAATTGGT TTATTAGTGA      480
GGAATTTTGA TCAATAAATG TCATGGGGCG GCGCTCGAG      519

```

(2) INFORMATION FOR SEQ ID NO:1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

```

GGCCACCTA GTTGGTATCC CAAATTCACA CATTCAAAG CAAAGCCATT TCTCACCTTC      60
CTCCAAAATA CTTGTAATTC CTAATATCCT GACTCCAATC CATTCTTTAT TTTCTATTCC      120
CAAGGCCCTT CACAGAATCG AAACCTTTGT TATGAGCTCT TACATGGTGT ATCATCAATA      180
TGTTCACTAG ACAGGAGTTT TTTTAAAAA AAATCCTCAT CATTCTCTT CAATTCAAGA      240
GCTCTGATGG CTTCCAGTCT ATACAAGATA TATTAAGGCT CAACTTACAG TTCCAGTCTC      300
ACCTGCCCCA CCTCCACCTT CCCAAACCCT CTGTATTCTA GCCAGAGCAT ACCTGCATTG      360
CCTTAGCTCA ACATGTGTCC TTGCTCACAC TGTCCCTTTG GTTGACCTAG CTTCAATTCC      420
TTCCTCATGT GCAGTTATGT GTCTACTAAG CAGCAATGTG AAATGTCTTT ATTGTAGGTC      480
TGTCAAAAGC TAAAGTCATG GCGCGGTGCA GTGGCTTGGG CCTGTAATCC CAGCACTTTG      540
GTAGGCCTCT TTGCCGAAT TC

```

(2) INFORMATION FOR SEQ ID NO:1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

```

GAATTCGGCC AAAGAGGCCT ATTATTGCTA TCGCCCTCCT TTCCCTTATT GCCTCCCAGG      60
CAAGCAGCTG GTCAGTCTTT GTCAGTGTG CAGCTTCCAA AGCCTAGACA ACCTTTCTGT      120
AGCCTAAAAC GAATGGTCTT TGCTCCAGAT AACTCTCTTT CCTTGAGCTG TTGTGAGCTT      180
TGAAGTAGGT GGCTTGAGCT AGAGATAAAA CAGAACTTTC TGGGTAGTCC CCTGTTGATT      240
ATCTTCAGCC CAGGCTTTTG CTAGATGGAA TGGAAAAGCA ACTTCATTG ACACAAAGCT      300
TCTAAAGCAG GTAAATTGTC GGGGAGAGA GTTAGCATGT ATGAATGTAA GGATGAGGGA      360
AGCGAAGCAA GAGGAACCTC TCGCCATGAT CAGACATACA GCTGCCTACC TAATGAGGAC      420
TTCAAGCCCC CTCAG

```

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

```

GAATTCGGCC AAAGAGGCCT AGTGCCTAGA TTGATCGGTA TAAGGCTCAC TCTCCCGCCC      60
CCCAAAGTGG TTGATCGTTG GAACGAGAAA AGGGCCATGT TCGGAGTGTA TGACAACATC      120
GGGATCCTGG GAAACTTTGA AAAGCACCCC AAAGAACTGA TCAGGGGGCC CATATGGCTT      180
CGAGGTTGGA AAGGGAATGA ATTGCAACGT TGTATCCGAA AGAGGAAAAT GGTGGAAGT      240
AGAATGTTCT CTGATGACCT GCACAACCTT AATAAACGCA TCCGCTATCT CTACAAACAC      300
TTTAACCGAC ATGGGAAGTT TCGATAGAAG AGAAAGCTGA GAACTTCGGA AAAGGCTCAT      360
CTGTCAACCCT GGAGAAGGGA AACTGTACTT TTCCCTGTGA GGAACGGCT TTGTATTTTC      420
TCTGTAATAA AATGGGGCTT CTTTGAATT TGATAAGCCT AGGCCTCTTT GGCCGAA      477

```

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

```

GAATTCGGCC AAAGAGGCCT AAGATGAAGC CCAACATCAT CTTGTACTT TCCCTGCTCC      60
TCATCTTGGA GAAGCAAGCA GCTGTGATGG GACAAAAAGG TGGATCAAAA GGCCGATTAC      120
CAAGTGAATT TTCCCAATTT CCACACGGAC AAAAGGGCCA GCACTATTCT GGACAAAAAG      180
GCAAGCAACA AACTGAATCC AAAGGCAGTT TTTCTATTCA ATACACATAT CATGTAGATG      240
CCAATGATCA TGACCACTCC CGAAAAAGTC AGCAATATGA TTTGAATGCC CTACATAAGA      300
CGACAAAATC ACAACGACAT CTAGGTGGAA GTCAACAAC TCTCCATAAT AAACAAGAAG      360
GCAGAGACCA TGATAATCA AAAGGTCATT TTCACAGGT AGTTATACAC CATAAAGGAG      420
GCAAAGCTCA TCGTGGGACA CAAATCCTT CTCAAGATCA GGGGAATAGC CCATCTGGAA      480
AGGGAATATC CAGTCAATAT TCAAACACAG AAGAAAGGCT GTGGGTTTAT GGAATAAGTA      540
AAGAACAAAC TTCCGTCTCT GGTGCACAAA AAGGTAGAAA ACAAGGCGGA TCCCAAAGCA      600
GTTATGTTCT CCAAACTGAA

```

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

```

GAATTCGGCC AAAGAGGCCT AGACCTGCCA CATTGTGTTAA CATTTTCCCA TTTCTAAACC      60
ATCCTTAAAG AAAATCATAT ATGGGGTCAC ACCATCTCTCA CGGTAGTCCA ATAGAGCAAC      120
CATGCCATCT GGATTCATGT TTTCACAAA CCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 410 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

```

GCACTGCTTC TGTTAAAGTC ACTGACCTTA ACAGTTTAGA ACTAGATAAA GGAAATTTTG      60
TGGTTGACCA AATGTGTGAA ATAGGTAAGC CAGAACCATT GAATGAGGAG GAAGCAAGGG      120
GTGTGGTTGA GAATTATAAT GATGAAGAAG TGTCAATTAG AGTTGGTGGA AATACACAGC      180
CAAGTAAAGT TTTGAACAAA AAAAATGTAG AAGCTATTGG ACTTCTTGGA GGACAAAAGA      240
GCAAAGCAGA TTATGAGCTA TACAACAAAG CCTCTAATCC TGATAAGGTT GCTAGTACAG      300
CGTTTGCTGA AAATAGAAAT TCTGAGACTA GTGATACTAC TGGGACCCAT GAATCTGATA      360
GAAACAAGGA ATCCAGTGAC CAAACAGGCA TTAATATTAG TGGACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

```

GAATTCGGCC TTCATGGCCT AGTTGCCCTA ATTTGCAGCC GAACTTGGAA GCCACTGTAT      60
CCAATGGACC TTTTCTGCAG CTTTCTTCCC AGTCTCTTAG CCATAATGTT TTTATGTCCA      120
CCAGTCCTGC ACTTCATGGG TTATCATGTA CAGCAGCAAC TCCGAAGATA GCAAAATTGA      180
ATAGAAAACG ATCCAGATCA GAGAGTGACA GTGAGAAAAGT TCAGCCACTT CCAATTTCTA      240
CCATTATCCG AGGCCCAACA CTGGGGGCAT CTGCTCCTGT GACAGTGAAA CGGGAGAGCA      300
AAATTTCTCT TCAACCTATA GCAACTGTTC CCAATGGAGG CACAACACCT AAAATCAGCA      360
AAACTGTACT TTTATCTACT AAAAGCATGA AAAAGAGTCA TGAACATGGA TCCAAGAAAT      420
CTCACTCTAA AACCAAGCCA GGTATCTCG AG                                         452

```

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 592 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

```

GAATTCGGCC TTCATGGCCT ACATGAATCT ACTTCTGATC CTTACCTTG TTGCAGCTGC      60
TGTTGCTGCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACATCT GTGAGGAGAA      120
TTCTGTCCCC TACCAGGTGT CTTGAATTC TGGCTACCACT TTCTGCGGTG GCTCCCTCAT      180
CAGCGAACAG TGGGTGGTGT CAGCAGGTCA CTGCTACAAG TCCCGCATCC AGGTGAGACT      240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAACAG TTCAATCAATG CAGCCAAGAT      300
CATCCGCCAC CCCAAATACA ACAGCCGGAC TCTGGACAAT GACATCCTGC TGATCAAGCT      360
CTCCTCACCT GCCGTATCA ATTCCCGCGT GTCCGCCATC TCTCTGCCCA CTGCCCTCC      420
AGCTGCTGGC ACCGAGTCCC TCATCTCCGG CTGGGGCAAC ACTCTGAGTT CTGGTGCCGA      480
CTACCCAGAC GAGCTGCAGT GCCTGGATGC TCCTGTGCTG AGCCAGGCTG AGTGTGAAGC      540
CTCCTACCCT GGAAAGATTA CCAACAACAT GTTCTGTGTG GGCTTCTCTG AG                                         592

```

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

```

GAATTCGGCT TCATGGCCTA AATAATTTT ATTGAGAATA ATAAATCACT CTTTATCATA      60
GTATCTTCTC TTCCCTCTTC CCCTTTAGTT TGGATAGCCT AACTCTGAGA AGTTAACCTT      120
TAAACAGTTT TCTGGAAGAG ACTGAATTTC TGGGTCTTG CAGCTGTGAT GGTTCAGAG      180
CTCAGACTGA TCAGGCATCA AGCTACCTTC AAGAGTTTCT GGGCTGGATG TTTCAGAAACA      240
ACATCTACAC CAGTAAAGTG TAATAGGTCA GTTCAAAAC GACCAAAAGA CCCCACCACT      300
CGAG                                         304

```

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

```
GAATTCGGCC TTCATGGCCT AGTGAACTC CATTTTTTTA CTGCTATTAC TCTGTGTTTT    60
CAGTTTTATG ATTTGGAATA CCATGATGGG AACATCTATA CTAAGCATTG CTGGGGGCAT    120
AAAACAGGCT GGATTACTA CTGGAATGTG TGTATCATA CTGATGGGCC TTTTAACACT    180
TTATTGCTGC TACAGAGTAG TGAAATCAG GACTATGATG TTTTCGTTGG ATACCACTAG    240
CTGGGAATAT CCAGATGTCT GCAGACATTA TTTGGGCTCC TTTGGGCAGT GGTGAGTCT    300
CCTTTCTCC TTGGTGTCTC TCATTGGAGC AATGATAGTT TATTGGGTGC TTATGTCAAA    360
TTTCTTTTT AATACTGGA ACCTCGAG                                     388
```

(2) INFORMATION FOR SEQ ID NO:1123:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 478 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

```
AGCAATTCCA TAAACACATC CTGGTGTCT CACAGCCAAG GTTTTAGGT TGCTATACCA    60
ATGGCTTATT AAATGAAAT GGCCTAAAA GTTCTGTGAG ATTCCTTTATA CTCTCTGCCT    120
TCAGCAATCA ATTCATTCA TACATCAGCA CTCTGCTGGT TCTGTTGAA ATATGTTCTG    180
TATTTAAAC TCAATCTTG TTGGATCTCT GCAGGGCTTG TGACCAATGA AGTCATATT    240
GTTGATGGTT GACAAAGCTT GCTTCACTCC ATCAGAGAAT GACTATCAAT TTTTITTTAA    300
CTGTCCTATC ACGTCTCTC CTGTCAACCA TTTTGAAGAG TGGCAGAACT TGAAGTTCAA    360
CTTCCTCTGT AAATATCCAA GTATAAGCC CAGGAACTTC TAGAATAACC CAGATGCGCT    420
TTAATTTTT TTAATATGTT TTGATCACAG AACTCCTTAG GCCTCTTTGG CCGAATTC    478
```

(2) INFORMATION FOR SEQ ID NO:1124:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 450 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

```
GAATTCGGCC AAAGAGGCTT AGGAATTCAG TGCAAACT ACTTTGAACT GTGGTTCCTA    60
ATTTCCACGA AAGTTTTTCT CTGTTCTTCT ATTATGGCAC TTTTCAGGGT CTCCCTTGTA    120
CATTTTAGTT TTTGTGTTT TCAGTAAGTG CCTTGAGATC AGGGACCGGT TCTACTGGTC    180
TGTTCCAACC ATAGTTCCTT AAACATTGTG TTCCATTAAT ATTGGGTGAA TTGAAATGAA    240
TTTATAGGAA GCTCCTTAAC CTGGGGTCTC CAGACCTCTA TGGGGTCCAT GGACAGAAAT    300
TGAAGTGGGA AGGATATATG AACTTGGATG GAGGAAAATT ACTTATTTGT TTTTACCAA    360
CCTCTCCTTT GTAATTTAGC CATTGTGTTA ATTATAATGT AGGCAAAATA AAATAAAAT    420
AAAAATAAAA TAAAGGCAGC TTAGGCCTCT                                     450
```

(2) INFORMATION FOR SEQ ID NO:1125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 550 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

```

GAATTCGGCC AAAGAGGCCT ATCCTTAGTG GATTCCGACT TCCATGGCCA CCGTCCTGCT      60
GTCTATATCA ACCAACACCT TTTCTGGGGT CTGATGAGCG TCGGCATCGG GCGCCTTAAC      120
CCGGCGTTTC GTTCATCCCG CAGCGCCAGT TCTGCTTACC AAAAGTGGCC CACTAGGCAC      180
TCGCATPCCA CGCCCGGCTC CACGCCAGCG AGCCGGGCTT CTTACCCATT TAAAGTTTGA      240
GAATAGGTTG AGATCGTTTC GGCCCCAAGA CCTCTAATCA TTCGCTTTAC CGGATAAAAC      300
TGCGTGGCGG GGGTGCGTCG GGTCTGCGAG AGCGCCAGCT ATCCTGAGGG AAACCTCGGA      360
GGGAACCAGC TACTAGATGG TTCGATTAGT CTTTCGCCCC TATACCCAGG TCGGACGACC      420
GATTTGCACG TCAGGACCGC TACGGACCTC CACCAGAGTT TCCTCTGGCT TCGCCCTGCC      480
CAGGCATAGT TCACCATCTT TCGGGTCCTA ACACGTGCGC TCGTGCTCCA CCTCCCCGCG      540
GCGGCGGGCG

```

(2) INFORMATION FOR SEQ ID NO:1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```

GAATTCGGCC AAAGAGGCCT AGTTTGACAG AAGAAGGCAT GGGATAGTCT GAGAACAAC      60
AGGCACTAAA TGGAGCAACA TCATCTTGAG GTGTCAAGCA GGAGCTGGGA GACCAGCAGA      120
GACTCCCAAG GCCTTGCTGC TGTGTGCTG CAGGCAGCTC TGTAGGCGAG GCTGTTGTCA      180
TTTTGCAAGT GAGCAAGCAG AAGCCCAGGC AGGTGAGTCA TTTACTCCAC AGTTCATAAC      240
TTGGATTGTG GGTTAGTTAC ACCTGACTCC AAAAATTGAC TTTTACTAC TCAGCTATAC      300
TGGCCTCTCA AGAAAGGCTA GGCCCTAATT TCTAGACTCT CTTTACCAC TAATACCTGT      360
TGCCACGAAG TAGGCCTCTT T

```

(2) INFORMATION FOR SEQ ID NO:1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC AAAGAGGCCT ACTCTCAAGG TGGGCATATG CAAAACATAA TCTCTAAATT      60
CTTCAATACT AAGAAATACC TTGTTTTC CCCTAAAATC AAATGCCATT TTGGCTGGAT      120
ATAGGATTCT AGGATTAAAG CCTTTTCCA GCAGAACTT GAAGACATTG CTCCATTTAC      180
TTCTAGCATC CAGTGTGTC AGTGATAAGT CTGCTGTCAA CCTGATTCTT GTTCCTTGGT      240
AGGTAATTTC TCTTCTCTCT CTAGAAGCCC TTATTATTT CTCTTATCA CTAGAATTCC      300
AAAATTCAC CAAGATGTGT CTAGGAGTCA GTCTCTTTTC ATCAATTTTA CTAGGTACTC      360

```


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361

(2) INFORMATION FOR SEQ ID NO:1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GCAGCCAATG GCGGCGCCAG AGGGGAAACN GAGCCTTGCT NACGGGCCCCA ACGCTGGGGA      60
GCAGCCAGGC CAGGTGGCGG GCGCAGACTT CGAGAGCGAG GACGAGGGCG AGGAATTTGA      120
TGA CTGGGAG GACGACTACG ACTATCCCGA AGAGGAGCAG CTCAGTGGTG CCGGCTACAG      180
AGTATCAGCC GCTCTTGAAG AAGCCGACAA GATGTTTCTG AGAACAGAG AACCAGCCCT      240
GGATGGCGGG TTTCAGATGC ATTATGAGAA GACCCCGTTT GATCAGTTAG CTTTATCGA      300
AGAGCTTTT TCACTGATGG TTGTCAATCG TCTGACCGAA GAACCCGGCT GCTCTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:1129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

```

GATGGCACCC TCCTCAGAAA GCAGCGTCCC CTCTCACAGT ATGTCCTCCC GACGGGACAC      60
AGACTCGGAT ACCCAGGATG CCAATGACTC AAGCTGTAAG TCATCTGAGA GGAGCCTCCC      120
GGACTGTACC CTCACCCCA ACTCCATCAG CATCGATGCC GGTCCCCGGC AGGCCCCCAA      180
GATTGCCAG ATCAAGCGCA ACCTCTCCTA TGGAGACAAC AGCGACCTG CCCTAGAGGC      240
GTCCTCGCTG CCCCCACCG ACCCCTGGCT CGAG                                274

```

(2) INFORMATION FOR SEQ ID NO:1130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

```

GGCTTTCCAC CTTCCCTGCG GAGATGAGGG TGGTGGCCTC CCTTTTGTG ACCCTTCCAA      60
GGGTCATGCT CGTCTGCTGG CTTTCTCCA AGATGCTGCC AAAAATGATC TTAA1AAGAC      120
ACAAGCCTGG TTGTGATATT TTCTGATTC AAGTGTCTCT GTGGTTCTTG GTTGCCCTCA      180
GGAGAGAGTT CAAGCCTCTT ATGGTGGTTT GTGAGGCCAG GCCTGAACTA GCCCCATCGT      240
CTGTTTATT ACCACCCAG TATCCCTGCT GCAGGTTTTT AAAGATCTCA TGTCCCTGAT      300
TGCCTGTCAC TGTGTCTGAC TCGAG                                325

```

(2) INFORMATION FOR SEQ ID NO:1131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 639 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```

CTCGAGGATC CCCGGGGACG GGACGGGCCG GGGCTTGGAG GGGGGTCGGC TGCCACAGGC      60
TCACATCAGC GCCTCCATAT GCAGGATCCT CAGGGCCTCG GAGATCTGCG CGCTGGGGTC      120
CATCTGGCCG TACATGCCCA CCAGGAAGGC CCGGTGGAGC AGCACAGCCG CGTGCTCTTG      180
GCACAGGAGA GCGTACTCAG GCAGGTTCCG GAGGGCCGTC TGCACCACCT CAAAGTCCTG      240
GCTGCCCAGG CAGTACATGA ACGTNGGGCA GGAAAGCGGC TGCAATGCNG GGGGCTGTCT      300
GCATGGAGCG CAGGGCCAGG CTGAAGCGA GGTTCGGCA ACACTCCTCG GCCGAGCTCA      360
TCAGCCGCTG CAGGTGGTC GAGAAGAAGC TCAGGATCTC GGGTCTCCGC CGGGACATCT      420
CGTCTATGTC ACTCAGAACC TCCAGCAGAT CCTCCACCGT TTGGCCCCCG GAAAGCCGTT      480
TCATGTAGGG GGCCATCTCG GCGCGGTCA GAGGGGTGAA CAGGGAGACG CTGACCAGGG      540
GCAAGGAGCC GGCTGAGCTC TCCTCCTCGC CCTCTTCGTC CAGGCCTCGG TCGGTCCTGT      600
CGTCCCTGCT GGGCAGGCTG AGCCCTGCAA GGAGGGATC      639

```

(2) INFORMATION FOR SEQ ID NO:1132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

```

GGTCTGTGGT CTTGGAGGCT TAAATGTAA AATACATCCC TTATGGAATC CTAAATTCCT      60
CTAGGTGTTT TTGGAAGCGC CATTGAGCC TTGTGAGCTA AAATGGAATG GATTTAATAT      120
TTCCTATCTG GCATTTCAT CTTGCCCCTG GTACACAAGT CACTGGCCTG GAACTCAGCC      180
TTGATTCACT GTCCGCTTC ACAGATTAGC TGTGCTGTTA TGTGTCTGT GCTGCAGATT      240
GGCCCATGTG GGAAGTCGGG GGGGACCTGA TTTCTGCTT GGAAGACTG GGGGACTGCC      300
GAGCATATCA AAGTGTATAT AGTCACCAAG TGAAGTCAG CACAACCATC TCCTCTCCAG      360
CAAGCCCTGA AGTCAGTAGT GCCTGCAGGT GAAACCAACC AGCCCTGTGT TAGAGGAGGA      420
AAAGCGGAGA TGACGTGGAA GTCTCGAG      448

```

(2) INFORMATION FOR SEQ ID NO:1133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

```

GAATTCGGCC TTCATGGCCT AGGGCTATGG CCGGAGCTTG AGATACGCCG CTCTGAATCT      60
TGCCGCCCTG CACTGCCGCT TCGGTCACTA TCAACAGGCA GAGCTCGCCC TGCAGGAGGC      120
AATTAGGATT GCCCAGGAGT CCAACGATCA CGTGTGTCTC CAGCACTGTT TGAGCTGGCT      180
TTATGTGCTG GGGCAGAAGA GATCCGATAG CTATGTTCTG CTGGAGCATT CTGTGAAGAA      240

```

GGCAGTACAT TTTGGGTTAC CGAGAGCTTT TGCTGGGAAG ACGGCAAACA AGCTGATGGA 300
 TGCCCTAAAG GACTCCGACC TCCTGCACTG GAAACACAGC CTGTCAGAGC TCATCGATAT 360
 CAACATCTCG AG 372

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

GAATTCGGCC TTCATGGCCT AGCTGGTTCT TTTATTTTGG TGTCTCAGGG ATGTAAAAGA 60
 TTTTGTAGTC ATAATATTAA ATGGCAAAAT CAAATTTCCC AACAATATAC AAAATAAAAT 120
 CCCATTTACA AAGGGAAAAG GCTTTATCTA TTTGTATATC TTCTTATATG TATATAAATT 180
 CATAGAAAAC TATCTGGAAG TGTATGTAGC AAAGCATTAA CAATGGTTAT CTCTGGGTAT 240
 AAGAAGGAAC TAGAACTGAA GAAGATGGTG GTGATAAGGG AAGGTATACC TTTCTTTTTT 300
 TTTTATCTCG CTGTGCTTGA GTTTTAAAGA ATGAGAATAT TCATGTATTG CTTGTATAAT 360
 TATAACACAG AAAACCTCCT TATTAGGAAT AGGAGGCTGA TTTCTTTTTT AATGACTGAT 420
 CTTAGGTCCT TTTTGGGTAT TTCTCCCTCG AG 452

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

GAATTCGGCC TTCATGGCCT AGGAGGAGGG AAGGATTGGG AGCAGTGGGG TGTGAGTGGG 60
 AGAGGAGGTA GGGGAACCAGA TGGGGAGAAT CGAGCCAAGT TCTGGGTGGG AGGAAACTTT 120
 CTTATTTAAC TGAGCTGGTG GGTACATAT CTAATGTTGC AGGTGATGAA TACAGGCTGG 180
 GGTAGCCGTC TAAATCCACC GAAAGAAGTA AATGAAAGTG GTTCTTGTA GGTGAAAGG 240
 TCAAGGTAAA TGGCTGGTTT TTAGGAAACA ACTGATCCTC GAG 283

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

GAATTCGGCC TTCATGGCCT ACTGGAGACT TGTAATTAGT CTAAGCATAA TATGATTAGG 60
 TGGATGAAAT ATTTGGAGT TTGGTTTGT TTTAAATGTA AATACTCATG AAAAGTAAAA 120
 CATACTGCAC TGTGTCCCTG GGAATATTTT TGTTATCTTT AAAATACTCA GTATTATAGG 180
 CATTATTAA CACAGCCTTA CATTGCCCCG GTTTGACCTG GAGGCCGAAA TGAATTGTGA 240

CTTATGTCCC AGCTGGGTCT CGAG

264

(2) INFORMATION FOR SEQ ID NO:1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 653 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

```

GAATTCGGCC TTCATGGCCT ACCACGTTTC CTCACCTGTA AAATGGACAC TGCAGCTATG      60
TCTGCTGTTC CACATTGTTG ATAGAACTGG ATGCTGTGGT GACATTGGG ACACATATCAT      120
GGTGCTGGG GTGGGTGGGT GCCCAGGCCT GTGGGCTTCT GTCTTTCATC AAAGAACTTC      180
AGATCCCAGA AAATTAAGAT TCTCAAACA TAACTGTCGG AAAGGGCTTT TGAATCCACC      240
TTGGTGGCCT CTTCTGCCT CCAGGGCTCA TGAGATAGGC TGACTTCATA TGAAGTTTT      300
GAGGATGAGG AAGTCTCTCT CCTCTCAGA TACTGACCTT CTCTCTCCTT ATTTCCTTGG      360
TGCCCAAGAT AGGGCTTTGG TTATCTTGAA TGAATGAATA TAAACTCACA GGTGTGATCT      420
GAGCCACCTA AAGCCCTCTT TGGGTCTGTC TCAGCTTGAG GGCATCACCT AAAGGCCACT      480
GGCTGCATT TCCAGGAGGT GTTTTCTAAG CTGTATCTAT ATAGGAATGG GGAGGAAAGC      540
TAAGTCATTG TAGACTGAGA GAAAGGGAAT AAGAGTCTGT TCCAGACCAG CTAGGGCTGA      600
CAAGCTTAGG CAGCTGGGG CAGAGGACAC TGAGAATGAG GCCCTAGCTC GAG              653

```

(2) INFORMATION FOR SEQ ID NO:1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

```

GAATTCGGCC TTCATGGCCT ACAAAGGTT CTTGATGACC ACCACAATCC TCGCTTAATC      60
AAAGATCTTC TGCAAGACCT AAGCTCTACC CTCTGCATTG TTATTAGAGG AGTAGGGAAG      120
TCTGTATTAG TGGGAAACAT CAATATTTGG ATTTGCCGAT TAGAACTAT TCTCGCCTGG      180
CAACAACAGC TACAGGATCT TCAGATGACT AAGCAAGTGA ACAATGGCCT CACCCTCAGT      240
GACCTTCCTC TGCACATGCT GAACAACATC CTATACCGGT TCTCAGACGG ATGGGACATC      300
ATCACCATTG TCGAG              315

```

(2) INFORMATION FOR SEQ ID NO:1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

```

GAATTCGGCC AAAGAGGCCT AGTTAATACT TATTTTATTT TCTGTTTTTA TCATCTAGTC      60
AACTCGCAA CTTCCAGCAT TTGTCTAAAT CTACTCAATA TATTCCAGTA CATCAGATAA      120

```

TATATCAGTT TCATCCTCCT GAAAACTCT TTTCCAGTGT ATCCTGACCT GCTCTAATTT	180
TGACTTGATG CTTTCTGTAT CTGGTGCACA GCTGTTACCT TGGAACTCTC CCTTCATCAT	240
TATTCAGAGT GTTCTGTAG TTTTCTCTT GCATTGGATT TTGTGCTTCC TGAATCCTCT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

GAATTCGGCC AAAGAGGCCT AGGGTTTTGT TTGGTTTGGT TTTAGTTTTT TGTGGGAGAA	60
TTAAGATTTT TTAAGAGATA TTTTCAGATT TTTCTGTTGT CAGTTTTGGT AATTGTGTGC	120
TTTTAGGAAA ATTTCAATTC ATCCAAGTTG TTGGATTAT TGGCATAAAA TTTTCAGAA	180
TATTCCTTTA ATATCCTTCT AATGTCTGTA GAATCTAATC TGTATTGCAG TCTCTTCATA	240
TTGTAATTT GTGTTTTTTC TATTTTTTCC TGGATCAGTC AGTCTAGCTG GGGAGAACTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

GAATTCGGCC AAAGAGGCCT AGTAGCTTAG TTATTGTTTA CTTTGAAGCC CTTTGCCTC	60
TACTCTCTCC CATATATCTT CTCCTGACAG GGTGAAGTCA CCTATAGCAT TTCCTAGTGT	120
ATGGAAGTAT TAATTCTTT CTTTACTGGA AGAGCTACTA GCTTTTCTTC ATACAGTTTC	180
CTCTGCTCCA GTTTCATAAG TTTCTTTTG GCTTGATCT GTTTAGGATC AGGTGATATG	240
GCTTCATTC TCATGACTGA AGCCCGGCAA CATAACACTG AAATTCGAAT GGCAGTCAGC	300
AAAGTGGCTG ATAAAACGGA TCATCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

GAATTCGGCC AAAGAGGCCT AGAGGGGAGC CTGGCCTCTG GCATATTCAT CAAGTATGAG	60
TTCTGGGGAT GAGTCACTGT AATGATGTGA GCAGGGAGCC TTCCTCCCTG GGCCACCTGC	120
AGAGAGCTTT CCCACCAACT TTGTACCTTG ATTGCCTTAC AAAGTTATTT GTTTACAAAC	180
AGCGACCATA TAAAAGCCTC CTGCCCAAA GCTTGTGGGC ACATGGGCAC ATACAGACTC	240

ACATACAGAC ACACACATAT ATGTACAGAC ATGTACTCTC ACACTCCAGT CGAG

294

(2) INFORMATION FOR SEQ ID NO:1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

```

GAATTCGGCC AAAGAGGCCT AGTTTGTAGT CAGAATAACA TTAATTTTGA GAGATTGAGG    60
TAAAGAACCT TAACTAATGC TAAGGAGTTT ATTTTGATTA ACATAGGTTA TTCTGACCAC    120
CACCTCTTCC TTCCTTAATC TCCTTAGAAT CTGACAGTCT CAAAGCTGTC ACACAAATTA    180
GACTAATTTT GACACTTTGA AATGAAAAC TCAAGGAAGA AGTAGCCACG GACAGTTATG    240
TTTATAATCA GTAGGTGGCA CTCTTTCCTC AGGTAGCCCC CCATTTTCAC ATGATGTGTT    300
TGAAGGTAA  ATGCCACCA  AAGTGCTCGA  G                                331

```

(2) INFORMATION FOR SEQ ID NO:1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 508 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

```

GAATTCGGCC AAAGAGGCCT ACTTCAGCAT GACTACTCAG TTGCCAGCTT ACGTGGCAAT    60
TTTGCTTTTC TATGTCTCAA GAGCCAGCTG CCAGGACACT TTCACTGCAG CTGTTTATGA    120
GCATGCAGCG ATATTGCCCA ATGCCACCCT AACACCAGTG TCTCGTGAGG AGGCTTTGGC    180
ATTAATGAAT CGGAATCTGG ACATTTTGGA AGGAGCGATC ACATCAGCAG CAGATCAGGG    240
TGCGCATATT ATTGTGACTC CAGAAGATGC TATTTATGGC TGGAACCTCA ACAGGGACTC    300
TCTCTACCCA TATTGGAGG ACATCCCAGA CCCTGAAGTA AACTGGATCC CCTGTAATAA    360
TCGTAACAGA TTTGGCCAGA CCCCAGTACA AGAAAGACTC AGCTGCCTGG CCAAGAACAA    420
CTCTATCTAT GTTGTGGCAA ATATTGGGGA CAAGAAGCCA TGCGATACCA GTGATCCTCA    480
GTGTCCCCCT GATGGCCGTT CGCTCGAG                                508

```

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

```

GAATTCGGCC AAAGAGGCCT AAATTGCTGG CGGATTAGA CCGGTAGAAA ACCCGGGATG    60
GTTTATTTTG ATTGAGCCCC CTCTGGGTGG CAGAGAGGAG GCTTGGGCTC TGGGCCCTTT    120
ACGTTTGGAG AAATGGCTTT ATCAGCTCAG TTGAAAGGTT TTTCCCTCTA GCTAGTGAAA    180
GATAAACTTG GAAATGCAGG TTTCTCCAGC GGTGTTGGT GGGGACAGGG GTCGCCTAGG    240

```

GAACCTGCAG GGGCCGCGGC CTCTGTTGTG CTCTTCTGGA GAGTGCAC TG TTTGTGGAAC	300
TTTTCTAGAG TGGCAAAAAC GATCTCCACT GTCGGTGAAA GGGCAGTTCC TGAAGTCAGC	360
TCATGGTCCT GGCTCCCCCT CTCCCCAGCA GTGAACTGGG GGTGACTTCC TGATCTGCCC	420
AGCACAGGAG AGCCCCGCAA AGCGCCTGGG AGGCCCTCGA G	461

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

GAATTCGGCC TTCATGGCCT ACCATTTTGG ATTGATTTT GTGTATAGTG TAAGATGAAC	60
CCAATTTCTCT TCTTTAGCAT GTGGGAATTC TGTTTTCTG TCACCCCTTT TTTTGAGAT	120
GGGGTCTCAC TATGTTGCCC AGGTTGGCCA TGAACCTCTG AGGTTCATGT ATCCTCCTTC	180
CTCAGCCTCC TGAGTAGCTA GGA CTACAGG CATGTGCCAC TGTGCCTGGC TCCAGCAACA	240
GTTGTTGAAG AGACTGTTCT TTATTTACTT ATTGTATCCT CTGTGCTCGA G	291

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

GAATTCGGCC TTCATGGCCT ACCCACCTGC CCACGCCGAC TTGGGAGGAT GGTGGCCTGC	60
AGCGGCCAAG AAGCCAAAAA AAAAAATTT TTTTTTTCA GATACTGTGC TTGATTTTGG	120
GAGAGGGGAG AGGTGGAAT TCCTAAATGG CTAATGCACT GTTCCCTCCA GCCCGAATGC	180
CTCCTGCCAA ACCCTTTTTC CTGTGTCCT CTGTCCCCGC ATCCTGTGTC TCCCTGGGT	240
CCGAAACATT TTTTCCGAGG ATGAACAGGG GACATCTTTA GGTTCCTCAA CTCTTGCTTT	300
GGTGTTTGCC GCAGCATGGA AAACAGGCAC CCCTCGAG	338

(2) INFORMATION FOR SEQ ID NO:1148:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

GCAGGAATCA GATTCAC TCA TTAGTAAGCC GCACTCGCTG AAGGGGAGAG CATGAGCAAG	60
GCAGACGTGA GCCACTGCGC CCGGCCTGAA GAGTTTTTGC TAATTGGATA TTAGGAAAAA	120
CCACAGGATG GATTAAGACA AGAGAGGGAA GGTAAAGTTC TAGACAGCAG GATTATGTCT	180
GTTAGTTGGT TTTATGTAC TTTCTAGCC AAGCTGTACC ATCCTGTTTT TGTGTGTTGG	240
TGAATGCTTC CAGCTCTTT CCTCCAGCCC TTGGAAGAGG TGGTCCTATA ATTGTTAAGC	300

ATCTAGCTAG GGTGATGAGT AGGAATAGCA ATAAGTGACA GGGAAGTTGA AGGCTGCAGG 360
GCTCTTTGCA GCGGCTTAC TCGAG 385

(2) INFORMATION FOR SEQ ID NO:1149:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCGGCC TTCATGGCCT AGTCACATGA ATGAGAGAAT TCTAAATGCA AGAAATGTGC 60
AAAGGCACAG AAACACAGAA GAGCATGTTG TACAACCTGG CTATAGTTTA GATTTTGTGT 120
GTGTGCTATG AGAGTGTGCG TGTGCTGTGA GTGTGTGTGT GGGCGCACGC ACGCATTGT 180
AGGAGGTAGG GAGAAGAGTG CCGGCATAAC ATGAAATGAT ATTGGACCTC AAATGGTATG 240
CTAAGATGTT TGACAATTTT ATTCTAAGCA GTGAGTTTTT AAATTTAGAC ATGCAATCTC 300
GAG 303

(2) INFORMATION FOR SEQ ID NO:1150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 419 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GAATTCGGCC AAAGAGGCCT AATTGAATTG TATTGGTCTT TTTCTCTTTA ATATTTTAGG 60
TGCTTTATTA TATATTAGGA TTATTAGTCC TTAGTTTGTG AAATAAGCTG CAAATATTTT 120
TTCCCAATT TTTCTTTTGT CTCTTTGCTT TATTTCTGGT GTTTATTTT CCCAGGTGT 180
ACTGTTTTCT ATAGCCAAAT TATTGATCTT TTCTTTAATT GCTTTTTTGT TCACTCAAAG 240
GAAGGTTTTT ACCACTGAGA GGTATATAAA TAATCACTC ATATTTTAC TCTTTTTTTT 300
TGCTTATGTT AATTTTTTGT TTGGAACAAT CTCAAATTCA CAGAAGTGTG GTGAGTACGT 360
TGCAATAAC TTGTTTTTTC CTTATGCATT TCAGAGTAAG TTACCAGTCC GCGCTCGAG 419

(2) INFORMATION FOR SEQ ID NO:1151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC AAAGAGGCCT AGCGGATGGA GTCTTTGACA GTGTTTTTGA TCTCCTGCAG 60
ACGGCTGCTC AGGAAGCTGT TGACCCGATC CAGTTCCCGG TCGGGCCACT CCAAGAGCCT 120
CTCCCTGGCA GGCCTTGGCT CCCGGCTTCC AGAAACACGA TTGCCTGCT TTAGAGCTTC 180
TGCTGCCAAC TGGGCCTTCT CCTTTTCTT CTTTTTCAGC TTGTGCCGGG CCCGCTTGSC 240
GGCCCTGGCG CTGTTGGGGA CTTTGGGCTC CGTGCTGTG ATGAATTCCA GCAGCTCATC 300

CACATCTCGG TGGTCCACGG CGGGCTCCCC AGGGATCCCG CCCAGGGTGC CCCCTTCAT 360
GGGCAGCTCC TCTTTCCGCC TGGTCAGCCT CGAG 394

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC AAAGAGCCTA CTGTGAATCA CGAACTGGCT GAGGGCGGCT GACCGCTTGT 60
AGCTGTTCCG GCCATGCACC ATAAGAACCG GCCAAGATGC TTAAATTGAG TGATGGAGAA 120
GTCTGCAGCC AACGAAGCCT GTTTTCCTTC CTTTCCTTCC ACTCCACGC CGCAGTCAGA 180
TTCCTGAATC ATGCTGACGT CATTGCCTCC GTCCCCCTACT GCACAGGTGA GCTTGCCCCGT 240
GCGCTCCTGA AGCAGGCGCA CGATCTGGGC CTTCTGGGTG GGGGCACATC NGCAGCAGAC 300
TACGGCCGGG CACTGGCAGG CCAGCTCCAT GAACTCGTAC TCATAGTACT TGAGGCAAAC 360
CTCCAGGGAG TCTCCCGAGA TGACCAGGGC ACAATCATGC TTCCTGCGGA AGGCGTTCAG 420
CTCGAG 426

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GAATTCGGCC AAAGAGGCCT AAGCTGATAT TTATTGGACA TTGCAACCAT GCCAAGCATT 60
CGGCTTGAT TATCCATTG GTTCTCACA GCCGGTATTT ATTGTCTGCT CCTCTGTGCC 120
AGGTGCTGTG CTCTGGGCAG GGGCACTGCA TGGGCTGCCT GCCCTGGTGG AGCTTGTGGT 180
CTGATGGGTG AGGCTGACCC AAGCCCACCC CATTGCCAAC AGGGCCAGGG CAAGAGTACA 240
CACAGGGGCC TCATACCATA TGTCTCGAG 270

(2) INFORMATION FOR SEQ ID NO:1154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 582 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

GAATTCGGCC AAAGAGGCCT AGCTGAAATC ATTCTGAAAA CTCAAACAGT AGACTTCAGC 60
ACACAAGGAA AGCCAAAGCC ATTGAGGGG GAATAAAGCC AAAAGCCTTT CACCTTATTC 120
GTTCCAAGAA TCTCACCGCC CCTCCTTAT CCCCCTCCAA AAATAAGCCA TTGCACACAG 180
ACAGGCAGCA TGGCTAGCAA ACGAAAATCT ACAACTCCAT GCATGGTTCG GACATCACAA 240
GTAGTAGAAC AAGATGTGCC CGAGGAAGTA GACAGGGCCA AAGAGAAAGG AATCGGCACA 300

CCACAGCCTG	ACGTGGCCAA	GGACAGTTGG	GCAGCAGAAC	TTGAAAATC	TTCCAAAGAA	360
AACGAAGTGA	TAGAGGTGAA	ATCTATGGGG	GAAAGCCAGT	CCAAAAAAT	CCAAGGTGGT	420
TATGAGTGCA	AATACTGCCC	CTACTCCACG	CAAAACCTGA	ACGAGTTCAC	GGAGCATGTC	480
GACATGCAGC	ATCCCAACGT	GATTCTCAAC	CCCCTCTACG	TGTGTGCAGA	ATGTAAC TTC	540
ACAACCAAAA	AGTACGACTC	CCTATCCGAC	CACAGACTCG	AG		582

(2) INFORMATION FOR SEQ ID NO:1155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCGGCC	TTCATGGCCT	AGGATCCGTG	AGGGAGACCG	CATCATCCAG	ATTAACGGTG	60
TAGACGTCCA	GAACCGGGAA	GAGGCGGTGG	CCATCCTGAG	CCAGGAAGAG	AACACCAACA	120
TCTCCCTGCT	GGTGGCCCGA	CCTGAGAGTC	AGCTGGCGAA	AAGGTGGAAG	GACAGCGACC	180
GGGATGACTT	CCTGGATGAC	TTTGGCTCTG	AGAATGAGGG	GGAGCTGCGT	GCTCGTAAAC	240
TGAAATCACC	CCCTGCCCGAG	CAGCCCGGAA	ACACTCGAG			279

(2) INFORMATION FOR SEQ ID NO:1156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GAATTCGGCC	AAAGAGGCCT	ACATTGTAA	TATAATTTAA	CAGAAGTTGT	GAAACTAAAA	60
TTTCTAAGA	TAACTGGTA	GTTCATTGTA	AATGAACATA	ATGAACAGAA	TTTATGACTC	120
CACGTGTGAA	AATGCTATCA	AATAACTAAG	GAATATATAT	GGAATAAGTG	TACATATGTA	180
AAATATTGTT	ACTAGAGTTA	GATATGTGCC	AAAGTCCATT	TATCCCAAAT	CCTGTCTGAA	240
AAGGAGGGGT	ACATTGGTAA	ACATTTTGA	GTGCTTAAAA	ATGCCAAAAA	CAAAATGGTA	300
ATTCTACTT	TGATAAAGTA	AAAAAGTTAA	ATGTGTGTAA	AAAAGTGCTC	GAG	353

(2) INFORMATION FOR SEQ ID NO:1157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

GAATTCGGCC	TTCATGGCCT	ACGGTGGCCT	TTGGGGCCGA	AGTGGGCGTG	CGGCTCGGCG	60
TGTTGCGGCG	CTTCCTGGTG	ACGGAGCTGC	TCCCCCGTT	CCAGAGACTC	ATCCAGCCGG	120
AGGAGATGTG	GCTCTACCGG	AACCCCTACG	TGGAGGCGGA	GTATTTCGCC	ACCAAGCCGA	180
TGTTTGTGCG	TGGAGAAAGA	TCGTCTTTCC	TCCCTCCCCA	TGACCGGGCT	TCCGCGGGGC	240

ACCTGTGCGT TTTCCACCCC GAGACGGCCT TTGTAGGGAC CCACTGCCCA CTCCGCTGCT 300
GTGCGCTGGG TTCCGCCTCC TAGGGCTCGA G 331

(2) INFORMATION FOR SEQ ID NO:1158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

GAATTCGGCC TTCATGGCCT AAAAAGCTTAG ACTGACATCT AGCTTTGACA ATCATAGTAT 60
GTTTTATTTT CCTGAGGGGG AATAACTTAT AATGCTGTTT AGTTTGTAC TATTGGTGTG 120
TTGGTGAATT TTAAACTGT GTGCTAACTG CACGATTGAA TTCTAGACCT GCCTCGAG 178

(2) INFORMATION FOR SEQ ID NO:1159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

GAATTCGGCC TTCATGGCCT AAGCACTTGG GGATGTTGAA GTGAGGGGAT TGCTTGAGCC 60
CTGGAGTTCA AGACCAGGCT GGGCAATATC GCCAGACCCC ATCTCTTAAA AAAAGTAGTT 120
CTTTACTGTT GCCTCTATTG ACTCTTGAAT GCAAGAAAGA ACATTTGCCC TTTGACTTCT 180
AATATTATCT TATATTCTCT CTCTTCAAA AGATCAGAAG CACATGCTGT AAACATCAAT 240
CATGATCATC TTGTCTCCC TTATCAGATT GTCAAAATTA TATCTTTTCC TATTTTCCTG 300
CATACTTAT CTTTTTCCTA AATTCTCAGT TCTCCAAGTT CTCAGAAATC ATAACCTCAG 360
ACCTTGAAAT GATGACTCTG TTCCACCCCC ATCGTCTCGA G 401

(2) INFORMATION FOR SEQ ID NO:1160:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

GGGGGGCCAG ACACGCNTGG GGTAAGAAGG GCCTGGTGGG AGGAGTTCAC AGAGCAGACG 60
GTGCACTGGG ACCAGGAGAG CAGAACACAG GCCATAACTA TAGGGCAGGT GGGGCAGGAA 120
CGGGTTAAAA ACGAGATCCA AGCCAGCCAG ATCGCAGGAG GTGCGGGGGC GTCGTCCCCC 180
TTCTGTTCTC CCCCCAAGGT CACAGTGCAT GCAATAAAAT ATATATACAG GAGCTAGATC 240
CGTCCTCTGC AGGGGCTCTG AGGGTCCAGA GCTCCCTTCG GGTGGCGGGA AGCCAGTGGC 300
GCTCCCTGGC GGCCAGGCCG GGCTGGAGCC ACATGCGTCG GGGTCTCGAG 350

(2) INFORMATION FOR SEQ ID NO:1161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 597 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

```

GCCCCGGAGC ATCTTAAGAG CTGAGCGCAG CTGACAACTA GGGGCCGGAC CGTCGCAGGA      60
GGCGTCCGCT GGATACCTTC CCCCTTCCCT GACCTAGAGC TCTACAGCTG CTGCCTCGGT      120
ACTGACCGAG GGTTCACAGA GCTGTCTCAC CATTGCAAAA ACGTTATAGC AACAGCCTCT      180
GATTACGACA TGGCTGAGAT CACCAATATC CGACCTAGCT TTGATGTGTC ACCGGTGGTG      240
GCCGGCCTCA TCGGGGCCTC TGTGCTGGTG GTGTGTGTCT CGGTGACCGT CTTTGTCTGG      300
TCATGCTGCC ACCAGCAGGC AGAGAAGAAG CACAAGAACC CACCATACAA GTTTATTAC      360
ATGCTCAAAG GCATCAGCAT ATACCCAGAG ACCCTCAGCA ACAAGAAGAA AATCATCAAA      420
GTGCGGAGAG ACAAAGATGG TCCTGGGAGG GAAGGTGGAC GTAGGAACCT GTTGGTGGAC      480
GCAGCAGAGG CTGGCCTGCT AAGCCGAGAC AAAGATCCCA GGGGGCCTAG CTCTGGATCT      540
TGTATAGACC AATTACCCAT CAAATGGAC TATGGGAAG AACTAAGGAA CCTCGAG      597

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(2) INFORMATION FOR SEQ ID NO:1162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

```

GAATTCGGCC TTCATGGCCT AGAAATAACT TAAATCCTG AATCAGATGT TTCTCCGTAC      60
ATGGCCTATC CAGATCACCG TAGGGTGAAG CTCAAAGTCA GCAAGCCTCA CCCACATACT      120
CAGAGCTTCC TTTCAGTGTG GAGACCTTCT TCCCTCTGAG CAGATGACAA AGGAGTTTGA      180
AACCAGCCTG GCCAACATGG TGAAGCCCCG TCTCTACTAA AAACACAAAA ATTAGCTGAA      240
ATGGTGACTG TAATCCAGC TACTCAGGAG GCTGAGGCAG GAGAATCGCT TGAATCCGGG      300
AGGCGGAGGT TGCAGTGAGC TGAGATCGTG CCATTTCATT CCAGCCTGGG CAACAGAGCA      360
AGCCATCACA GATTTGGGAG CAACCAAGAA AGCCAGGGAC AGGGTATGCT TGGTAACCTG      420
GCAAGAGCTG ACAAAGGGGA AAAATAAAAC CCCACAGAAA GAGCAGGGAA CTCGAG      476

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(2) INFORMATION FOR SEQ ID NO:1163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```

GAATTCGGCC AAAGAGGCCT AGATGAACAT GAACCTGCGG GAGCTGTACC TGGCGGACAA      60
CAAGCTCAAC GGCCTGCAGG ACTCGGCCCA GCTGGGTAAC CTGCTCAAGT TCAACTGCTC      120
CCTGCAGATC CTGGACCTCC GGAACAACCA CGTGCTAGAC TCGGGTCTGG CCTACATCTG      180
CGAGGGCCTC AAGGAGCAGA GGAAGGGGCT GGTGACCCTG GTGCTGTGGA ACAACCAGCT      240
CACGCACACA GGCATGGCCT TCCTGGGCAT GACTGCGG CACTACTCAG GCCTGGAGAC      300

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GCTGAACCTG GGCCACAACC CCATCGGGAA CGAGGGTGTG CGGCACCTCA AGAACGGGCT 360
CATCAGCAAC CGCAGCGTGC TCGCCTCGG GCTGGCCTCC ACCAAGCTCA CGTGCGAGGG 420
CGCGGTGGCG GTGGCGGAGT TCATCGCTGA GAGCCCCCGC CTCCTGAGAC TGAACCTCTG 480
AG 482

```

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

```

GAATTCNGCC AAAGAGGCCT AAGGAGCGCT GTTAAAGCTG ATACATTCCT GTGGGTCAAC 60
TATGCAACTA ACTCAGATTT TGAGCAAACA AAGCTCTCAA GTTGGTGATC CTCAGGAGTC 120
TCTGCATTAG TTGGACAGCT CTTCTGGAAT TATCTTCTAA GTCAACTGTG GGTTCGGTAG 180
GTGGCTCTGC TGATTTTTCG CTGGACTTCC ACATTTGGGA CCAGTTGGCT GTNATCAGCT 240
CTAGAAAGGG TGTGGCTGTT TTACATTGGC TGTTCCTC ACATTCCTCA AGCAGGTACT 300
GTAATAAAGA ACTGGAGAAA TACAGTCAGA TGGGAAGTAG CCCCTGCTGT CAAGGAGCTT 360
GCCATCTAAT GGGGAGAGCA GGCAAGTAAA CCAAAGACTA CACAGTGCAG TATGGTAAAT 420
GCCATGATTT TGATGTGACA GGGCAGAGTG GACGACCTTC CAAATCAAAG CAAGTAACTA 480
GGGCAGACT CGAG 494

```

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```

GAATTCGGCC TTCATGGCCT AACTCTTATC TGTGAACACA ACTTTTCAGC ACTACAAATG 60
CAAGCAACTG CGCAGTCACA GTTGGGGCTG CTAATTGGA AATCCAGTTT AGGCTGATTT 120
GAAAAGACAA CAGCATTTTT GCAATCACTG GTGTATCCTT TACGAGAGAG CTAGTCATGC 180
CATTTTTTGT TTTCTGAAGA CGGCCTTTT TTCTTTTTA TTATTATTAT TTTTAAAT 240
TTGGGATCTT GCCTAATTCT TTAGTACAAA GCCTGGCCCT AAAACCGTAG AGCTCGAG 298

```

(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

```

GAATTCGGCC TTCATGGCCT AGATAGAAAA GAATATTCCA AGTGATGAA GTATAGAGGT 60
GGGGAAGTTC AGGGTAGAGA AGTANTAGCA GGAATAGAAT ATAGGGGGAC AGAAAAATAG 120

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AGTGGAGCCA GATTGAGAGA ACTTTNAGAA GCAGGTAAAG AAGTTTAGGA TTAATGGACA    180
AGTCATTGGG TCTCCAGGTT TCTTTGAGGG AGAGTGATAT CTGAGCTCTG TTTTAGAAAG    240
ATTAATCTGA AAGGAGGTAA CTCGAG                                         266

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(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

```

GAATTCGGCC TTCATGGCCT AGGTAAATAA TGCCAAGTTA CTGGGGTCTA GAAAGAAAGT    60
TTTCTCTTGG ATCAAGAGAG TGTGAGTTTC CTAAGTTTCT TCAGCAGGGA TGTTGGTCCT    120
TTAGTTAGGA GGTTTAAAAT CACCAGGAAG TAAGGGTGAG GAAGAAAGTC TGGGTCCATG    180
TTTGAGAAAG TGAAGTATGG TGGTGAAGT CCTTCTGTG ATGAGTTAAT GATGCGTATT    240
TCTGATAAAG ATGGGAAGTT ATTTACATCG ACATTAACCA AATCTACCC TCATGCAGAA    300
AGAAAGAGCT CTTGGGCCAT TCTCTATTAA TGAAACCATA CCAGGGTCAA TATTACAGTG    360
TCTCTGAAAT ACACTGAAAA TACTTCCCTG GCTCAGGTGG TGGCCCATGC TACCTCCAGG    420
CAGTTCTACT TGATTAATGA TGCAATGGAG ATAATCCTAT TGCATCCACC ATCAAGGAGA    480
GTTGGGCAGT CAACTCGAG                                         499

```

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

```

GAATTCGGCC TTCATGGCCT ACACAAACAA ACCCAGAATA CTCTATTACT GTATTTGTGG    60
GGTACAATCC ACTCAACTCT ATTATGAAGC CCAAAAAATA AATCTGTAA AAACAATAAT    120
AGCTACACCA ACCTGTTAAG AGATAGGTAA TATAAAAATA TATAGTTTGA GACAACTAAA    180
TCAAAATGGA GGAGGGGATA GAGTTCAAGA AGTAGAATTT TTTTGCGTGT GCTTTTCTTG    240
GCCTTTGTTT GCTTCTATT CTTTATTGGA AATCAAAGAT AAGTTATCAA CTCTTTAAAA    300
TAACTTGTTA TATGTATAAG ATGTTTCTG TAAGCCTCAT GGTAACCACA GTACAAAAAC    360
CTATAGTACA ATTCCTAAAA ATAAAATACA AAAAAATTAA AATATACTAC CAGAGAGCTC    420
TCGAG                                         425

```

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

GAATTCGGCC	TTCATGGCCT	AAAAGGTTTG	ATCTTGTAAT	GTGTCACTGT	GTTTCCTTAG	60
TGGCCAGCCA	GCCTTCAGAA	TAGCTAAAGG	CCTTCCTTCC	TTCCAGTCAG	CCTGAGAGAG	120
AACACCTGTC	CCCTAAGCAC	CTGGTGTCTC	CATTGGAGGC	AGACTGCTCT	CAGGAGACTA	180
CTAGAAGCTT	CAGCCCGGAA	GACAGGCTGC	TCTCTCATGC	TGGTGGCCCA	AATGAGAAA	240
GTGGTGTCCC	TTCTGTGATT	TGCCACCAGC	CCTACCGAAT	AGTTGTAAAC	CAGTATCAGG	300
AATTGGGATC	CTCTCGAG					318

(2) INFORMATION FOR SEQ ID NO:1170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

GAATTCGGCC	TTCATGGCCT	ACATTGGTCG	TTTATTGCC	ATGGCACTAT	TTCATGGAAA	60
GTTTATCGAT	ACTGGTTTCT	CTTACCATT	CTACAAGCGT	ATGTTAAGTA	AAAAACTTAC	120
TATTAAGGAT	TTGGAATCTA	TTGATACTGA	ATTTTATAAC	TCCCTTATCT	GGATAAGAGA	180
TAACAACATT	GAAGAATGTG	GCTTAGAAAT	GTACTTTTCT	GTGACATGG	AGATTTTGGG	240
AAAAGTTACT	TCACATGACC	TGAAGTTGGG	AGGTTCCAAT	ATTCTGGTGA	CTGAGGAGAA	300
CAAAGATGAA	TATATTGGTT	TAATGACAGA	ACGGCGTTCG	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

GAATTCGGCC	TTCATGGCCT	ACACTTTATT	CCCTTTTAAG	TCTGGTAAAG	AATGAATACT	60
TGGACGTTTT	GTTTCATGCA	GATTTAGTTA	GCAACTCGAT	TATCAAATGG	TAGAATATCT	120
GTATGCACTG	AAGCCAAATT	CTCAGTAACT	CAGCTTTTGN	TAGTCATATG	AGGATGATGA	180
ATAATAGGAN	TCCAGAGCAG	TTAACAAATT	GATACAAGTG	GTAGGAAAAT	TTGATATGAA	240

(2) INFORMATION FOR SEQ ID NO:1172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

GAATTCGGCC	TTCATGGCCT	AGTTTCNTTT	TTGTATCTCT	ACTGATATCA	CCAGGATAGT	60
NTACTCTCCT	TCTAGCTTTC	TGCTTACCGC	ACACTGGATA	ACACACACAT	ACACACCCAC	120
AAAAATGCTC	ATGAACCCAA	TCCGGAGAAG	GTTCCAGCAG	GTCCCCCACC	CTCCCCTCCT	180
CCTCCTACTT	CTCCTCTTGA	CAGCGAGGAC	AGGAGGGGGA	CAAGGGGACA	CCTGGGCAGA	240

CCCGCCGGCT CTCCCCCAC CCCACCCCA TCTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

GAATTCGGCC TTCATGGCCT AGAAAAGTCT AGAAAATAGC TTAAATAACA AACACGTGTG	60
GATTTGTTAG ACCAAGAGCA AGGGAGACCA TTAAATGCAG TTATTTAACA ATATTTAGTA	120
CTTTCCTTTA CCTTGTCTGC TGTGCCATCA TTCATGCCTG TCAGTGTATA AAATCCCCAA	180
ATTTCCTAAA CAGATTTTCA TTCACTTCC GTCAACTTTT AAATTAAGT TTTTAAATTC	240
CTGTCCCCAC TCCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

GAAAGTTGCT TTTGATGTCA AAATGGAAAA TGAAAAGTTA GTTTTAGCAT GTGAAGATGT	60
GAGGCATCAG TTAGAAGAAT GTCTTGCTGG TAACAATCAG CTTTCTCTGG AAAAAACAC	120
TATTGTGGAG ACTCTAAAAA TGGAAAAAGG AGAGATAGAG GCAGAATTGT GTTGGGCTAA	180
AAAGAGGCTG TTGGAAGAAG CAACAAGTA TGAGAAAACC ATTGAAGAAT GTCTTGCTGG	240
TAACAATCAG CTTTCTCTGG AAAAAACAC TATTGTGGAG ACTCTAAAAA TGGAAAAAGG	300
AGAGATAGAG GCAGAATTGT GTCGGCCACT CGAG	334

(2) INFORMATION FOR SEQ ID NO:1175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 403 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

GAATTCGGCC TTCATGGCCT AGTGCTTGAA CTCACGCATC TGTTTACCT GCATCTGCAG	60
GCGATGGGGC AGGGGCCACG GAAAGAGTCT GAGGGCTGCT TGGTGTAGTC AGGTGTGTC	120
CAGGCATGCG GAGCTGTGAG TGCCTGCAGG AGAGACACCC AGGAGGAGTT TTTACATTTT	180
GGTCTAAAAA GCTCTTGGAT TCATCTCATC TCATGGAATG ATCCTGTCGG ATGACGCTGA	240
CGTGATTGCT TCAGACTTAG AGGTGAATAA ATTGAGGTCC AGAGAGGTCA CAGTCACGAA	300
GCTCATGGTA GACTGAGGCC ACTAAACACC CGTCTCCTGA TTTTCAGTGG CGTCCTCATT	360
TGCATACACC TGGGCCATCT TGGTTTTTGC AAGAAAACCT GAG	403

(2) INFORMATION FOR SEQ ID NO:1176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 590 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```

GAATTCGGCC TTCATGGCCT AGGTACCTTG AACATGGCTG TAAATTAATC TTTAACTGCC      60
TTGGTGGAGT CTTCTGATT TATTGAAGAG AATAATCAGG AAAATAATTT TTGTTTGTTT      120
TTTGAGACGG AGTCTCGCTC TGTCACCAGG GCTGGAGTGC AGTGCCACGA TCTCGGCTCA      180
CTGCAGCCTC TGCCTCCCAG GTTCAAGTGA TTCTCCTGAT TGAGCCTCCT GAATAGCTGG      240
GATTATAGGT GTGCACTACC ATGACCAGCT AATTTTGTGA TTTTGTAGTAG AGATGGTGTGTT      300
TCACCATGTT GGACCGGGCT GGTCTCGAAC TCCTGACCTC AGGTGATCTG CCCTCCTCAG      360
CTTCCCAAAG TGTGGGATT ACAGGCATGA GCCACCGCAC CTGACATAAA TATTTAATGT      420
AATACCGTGT AAGACTTTTC CATTGGGTTT TGAGAAACAC GTTAATGAGA GAAATTGCCTT      480
AACATTGGAG AGGATTGCAG AGAATATTGA CTAATATGGT GGGGTGAGGA GGAACAACAT      540
CAATTAAGAT TCAGATTAT TATTTAAAAA AACTAAAAGG CGGCCTCGAG      590

```

(2) INFORMATION FOR SEQ ID NO:1177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 562 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```

CTCGAGGTAG CCACAGTCCT GATCCTAGTG ACAAATGGGG GCATGTGTCT ACATCCGGGT      60
CGGCGGAGGG CTCATTCAT CTGGCCTGGG GGGAAATGAG TATTAATTTG TTTACACAGA      120
CGTAAACACA GCCCAAACG CATCAGCAGG TTGACTCAA CGCCCGCAAC GCCAGGGCAA      180
AGGCAATTTG GTTAACAGGG GGAAGCGAAC AGACGGAGAC GCCTGGAGAC CCAGGTGCCA      240
CAACCCGTTT AATCGCGGTG CAAATAAGGG CAAGTCCCCT CCCCTGTGCC GTGTGGTCTT      300
GACAACGACA CTAGTTCATT CTAATAACAA GGCGGGCGGG GGGTCAGATG GGCCACACAC      360
ACCCATTTTC CTCAACGGGA CCCCAACGCG ATCTCAGCCT TGCTGTGCTA CTTTAGGGCA      420
AGACGCGTTC CCCATTCGGA AGCCGCAGGA AAGCGCGGCG AGAGCGGGTT AGCCCTCGGA      480
GCGGCTAAGA GCCTCGGAAT AGCGCAGAGG AAGTCCCAC CCCTCTCGGG GCTGGGAGCC      540
CTAGGCCATG AAGGCCGAAT TC                                     562

```

(2) INFORMATION FOR SEQ ID NO:1178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```

GAATTCGGCC TTCATGGCCT AGAAGCACAG GTAAACAAG CTGGGGCTTA TGGTCAGCAT      60

```

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TGAAGCAGG GAGCAGAGTG GGGAAAACAG CAGTCTTATG GGACTGAGTC CTCAATCTGT      120
GTGATCTGAC TCTATCTGCA AGGTAGTGTT GGAAGTGAAC AGGGTTGGAG AATGCCCAGC      180
TGGTGTCCAC CGCAGAATTG ATTTCAATGT TGGTATGCAG GGACCCCCCA CTCCACACTT      240
AGTCACAGAA ATCTGTGTTG ATTGTTGTGG CATGAAAGCA GGGAAAAATA GTTTGTTTTT      300
TTCTCCACAC TTCCTTCCCA AGATCCCGGC TAACTCGAG                                339

```

(2) INFORMATION FOR SEQ ID NO:1179:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

```

GAATTCGGCC TTCATGGCCT ACTCACCAGA GAAAAGAAGT TTCNGAAGAA AACCACAACC      60
ATGCCAATGA ACGAATGCTA TTTCATGGGT CTCCTTTTGT GAATGCAATT ATCCACAAG      120
GCTTTGATGA AAGGCATGCG TACATAGGTG GTATGTTTGG AGCTGGCATT TATTTTGTCTG      180
AAAACCTCTC CAAAAGCAAT CAATATGTAT ATGGAATTGG AGGAGTACT GGGTGTCCAG      240
TTCACAAAGA CAGATCTTGT TACATTTGCC ACAGGCAGCT GCTCTTTTGC CGGGTAACCT      300
TGGGAAAGTC TTTCTGCGAG TTCAGTGCAG TGAAATGGC ACATCTCTCT GAG              353

```

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

```

GAATTCGGCC AAAGAGGCCT ACAGAGTGCT GTGCTTAAGT TTTACTTCTT TCCACCTTTA      60
AATCTCTGAT AAGTTTCTTT TTATCTAAGG GTTCCACTTT GTTCATTACT TTTTGTCTCC      120
TTATTATTGA TTTGTTGAG AACCTGAGT TCTTGACCTG TGTGATTTTG TACCACCTGG      180
ACTTTCTGAC TGTGTTTGCC CAGGCTGGAG AGCAGTGGTG GGATCATAGC TTACTGGACT      240
CAAGCCATCC TCCCGCCTCA GCCTCCCAAG TAACTGGGAC TATGGGCACA CTCGAG          296

```

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

```

GAATTCGGCC TTCATGGCCT ACTTGAGTTG TACATTAGAT CTTTAAACTT GTTAGTCTTA      60
CATATCTGCT ATTTTATATC CTTTGACCTA CATTTCCTCA TTTCTCCCA GTGTCTCTC      120
CCCAGGTAAT CATTGTTTGA TTCCCTTTCT CTGTAATTTT GACTTTTTTT TTTGGATTCC      180
ACATATAAGT GAGATCATGA TCATGCGGTA TTTTCTTTT TGTGTCTGGC TTATTTCACA      240

```

TAGTATTATG TCCTCCAAGT CTACCCACGA ACTCGAG

277

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

GAATTCGGCC TTCATGGCCT AGAGATACTG GCTGGCAATT CTTGGCGTTC CTTGGCTTGT	60
AGCTGTAAGA TCGCTCTAA TATCAGTCTC TGTTGTCATT TGCCTTTTCT CTGTGCTGT	120
GTTCAAATGT CCTTTTTTTT TTTTTTTT GGGAGTCTTG CTCTGTGCC CACTCAAAC	180
GCTGGGCTCG AG	192

(2) INFORMATION FOR SEQ ID NO:1183:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

GAATTCNGCC AAAGAGGCCT AGTAAATAGT TGTCTGTTA CATTGTTTAG AGAATAATGA	60
CAAGAACAAA AATCTGTGTG TTCAGTATAG ACACAACCAT CCTTTTCTTT TTTTTTTTTT	120
TGAGACAGAG TCTCGCTCTT GTTGCCGAGG CTGGAGTGCA AGGGTGCGAT CTCAGCTCAC	180
CGCAACCTCC GCCTCCCGGG TTCAAGCAAT TCTCTGCCT CAGCCCCCGG AGTAGCTGGG	240
ATCACAGGCA TGTGCCACCA CGCCCGGCTC TTTTGTATT TTTAGTAGAA CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:1184:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

GAATTCGGAC TACTACAGGT GATACTACAG TGACTACTAC AGTAATTCGG ACTACTACAG	60
GTGGCTAATT CGGATTACTA CAGGTGGACA TAATTCGGAC TACTACAGGT AATTCGGACT	120
ACTACAGGTG AGCTAATTCG GACTACTACA GGTGGACATA ATTCGGACTA CTACAGGTGC	180
ACCTGTAGTG GAGAACATTT AGCAATGATA AAGCCGCTGC TGATCCTTCT CGAG	234

(2) INFORMATION FOR SEQ ID NO:1185:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

GAATTCGGCC AAAGAGGCCT AGAACAGTTT AGAAACAATT TCCCTGCCTT TGCTTTGGGT	60
TCCCTGTGAT TGTTCTCCAC ACTGTTTTC TGGCTCTATC TGTCTCCCTT GCCACGGCCA	120
CTCAAGCCTA GCTGCCCAAC AGCTCCTTCC CTGAAGAACC CCGGCCTTCA GGCTTGACAG	180
GTGATCTCAT CCCTCTTCTT TTCTCCAGG TTGTTGTAGA CTTCACCTT CCCTTCTTCT	240
CCTGGTCCTT TCCCCTTTCT AGTGCCAATG TGGGCCACGC TTTCATCCCA CCTACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:1186:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 324 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

GAATTCGGCC TTCATGGCCT AGTGATGAGC CCTCCTCTTC AGCTAGGAAA ATGACGGTGT	60
TCAGAAAGTT AAAACTTCTT CGCTGGAAGG ATTTTCATCTT AAAGTTGGGA GACTGGAAGA	120
AATTAAAGTG TTCTAAATGG AAGAGCATTG ACCACATGTG TTCTGTTTGG GGTGACATT	180
TAGCTTTTGT TTTTATTTTA GAAACGGAAG ACTCTGGTAG CAGTCCTTGA AATCTTGATG	240
CCATGCTAT TTCTGCATT GTATTGTATC TTCGTTTGTAG TAGTGCTCCA ATAAAAAGAC	300
CTGCTACTAG CTGCAAACT CGAG	324

(2) INFORMATION FOR SEQ ID NO:1187:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

GAATTCGGCC TTCATGGCCT AGTACGTTGC TGAAAAGAAG TTTATTGCTA TTTTCTTATT	60
TTATTATACA AAACCTAGATT TGCTTAAAC ATTTCCAGT CTCTTAAAG GAATGCTAGT	120
TAGTGGGAGG CCACAGCTAG TAAATTACCC TCAGTAGTGG TTCAAGTAG TCCATACTA	180
TAAAAATCGT TACGGCCAGG ATATGCCGGA ACAGAACACT CCCCCTGGG GTCCTCAGCC	240
TTGGATGTCA GCTCGGCCCC TCAAGGGGTC CCTACACCTG GAAGCTGATT CCACTCATCA	300
GTCTCGAG	308

(2) INFORMATION FOR SEQ ID NO:1188:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

```

GAATTCGGCC TTCATGGCCT AGAATGAAGA AGGTTCCCAA GAAGTTAGAG GAGATTCCCC      60
CAGCCTCTCC GGAGATGGCA CAGATGAGGA AGCAGTGCCT GGACTATCAT TACCAGGAGA      120
TGCAGGCTCT GAAGGAGGTC TTCAAGGAGT ATTTGATTGA ACTGTTTTTC TTGCAACACT      180
TTCAAGGGAA CATGATGGAT TTCTAGCTT TCAAGAAGAA ACATTATGCC CCATTACAAG      240
CACCCTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

```

GAATTCGGCC TTCATGGCCT AAGGAGTTGG AAATTGTGCA CAAAGAAAGG TGGTGAATAA      60
GTAAAGTCGT AAATTCAAGA CCACAACAGA AAGCTTCACT GCAGACACTG GACTTGAACC      120
ACCATTGAAA ACAGTCAGGA TTTGGAGATG ATAATTAGGA GGATGTGTAT TCTAGCTGTG      180
GAATTATTG TGGGCAAGCA TAGGAATGAG AAAGTACAAT GAAAAAATGT AAGTAGACCC      240
ACCAAGTTAG AGAAGAAGGT CCTGGTTAAG AAAAATGAAA GATTTTTTTG AACAACAGAT      300
TAATGTGATG AAATAGATGT TCAAGAGTGA AGATAAGTTG AAGATAGGGA CCCCTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

```

GTTGTTAGGC TGGTGTGTT ATGTTGCTGT TGTATGCTG GTCGTGCTGC TCCATGTTCT      60
CCAGGTGTTC TTCCCTTTTA TCGTCACAGT TACCCCGTAC ACCTGACAAC TGGACATCTG      120
CGCCTGGGGT CTTCAGCCTA AACACACCTA AACCCTCCAC CAAACCCCTC TGCTTCCGCC      180
TCCCGTGTG TGTGAGCGCC TCCACTGCCC ATCCCTCTGC TCAGGCCCCA TTTCCAGGGC      240
TCGAG                                     245

```

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTCGGCC TTCATGGCCT AGTCTCAAAA AAAAAAAAAA AAAATAGTGT TCAGCAAGGT	60
TGAAGCATAA AAGGTTAATA GCCAGAATCA TTTATCAATT GTATTTCTAT ACATCTACAA	120
GACACAATCT GAAAATGAAA TTAGAGAAAC AATTTCACGT GGCAACAAGA GCAAACTTC	180
ATCTCAAAAT AATCATCATC ATCATCATCA TCATCATCAT CATCATCTAC AATGTCATT	240
CCCATCCAAC GCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 748 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

GAATTCGGCC TTCATGGCCT AAGGACATGG CAGAGTTCCT GCTAAAAGAG AAGACAGTTA	60
TTTAAGGAGG TTTGAGATTC AAGGGCTTTT TTAATTTTAA AATTAACCAT GGTAGAAACC	120
TGTGTGTTAA TATGCTGAGG GAAGTTGCCA ATAGTGAGAT GAAAGATCTA GGCAAGGGGA	180
TAGCAAGGTG ACTGCACCAG ATACCTGGAT CTGGGCAGGA ATAAACCTCA ACAGTGATCA	240
TGTTGACCTT GAGTGACAGG GTATAATGTT TGGGAAGGTG CTTTGTAAC TATAAGGGGC	300
AATACAAACA TGTAAGTACAC CTTCTCTGAG ATCCGGGAAA GGACAACCTG AGCATAGGTT	360
GGGGCTGGTC ATAGGCCACT CTCCTACT GTTCTCTAG AGTGTGTGTA GTCCCTAGCA	420
AGTCTCAGAT GCCTCGACCT TCATGGCCTA GAGAGTTCTC ATCAGAACAG GAAGGCAGTG	480
ATGATCCATT GCATGGGCAG GATTGTTCTA CGAAGACGAA GATCTCCGGA AAGTGAAGAA	540
GACCCGGAGG AACTAACCT CAACCTCTGC CATCACAAGG CAACCTAACA TCAACAGAA	600
GTTTGTGGCC CTCCTGAAGC GGTTTAAAGT TTCAGATGAG GTGGGCTTTG GGCTGGAGCA	660
TGTGTCCGCG GAGCAGATCC GGAAGTGA AGAGGACTTG GATGAATTGT ATGACAGTCT	720
GGAGATGTAC AACCCAGTC GACTCGAG	748

(2) INFORMATION FOR SEQ ID NO:1193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

GAATTGCCAA CATGGCAGCG CGTTGGCGGT TTTGGTGTGT CTCTGTGACC ATGGTGGTGG	60
CGCTGCTCAT CGTTTGCAGC GTTCCCTCAG CCTCTGCCCA AAGAAAGAAG GAGATGGTGT	120
TATCTGAAAA GGTTAGTCAG CTGATGGAAT GGAATAACAA AAGACCTGTA ATAAGAATGA	180
ATGGAGACAA GTTCCGTCGC CTTGTGAAAG CCCACCTAA TCTCGAG	227

(2) INFORMATION FOR SEQ ID NO:1194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

```

GAATTCGGCC TTCATGGCCT AGTATATATA TAAATACTG AGGATTTAGG GCTGATGTAT    60
ATAAATAAAA TACTGATAAC TTTTTCCTT TCTTTTCTT TTTTGTGA GATAGTGTC    120
TGCTCTGTG CCCAGGCTGG AGTACAGTGG CACCAAACCG CTAAGTCAG CCTTGCCCTC    180
CCAGGCTCAA GCAATCCTCC TGCCTCAGCA CCTCAATAA CTGGGACCAC AATTGCATGC    240
CACCAAACGC ACCTCGAG                                         258

```

(2) INFORMATION FOR SEQ ID NO:1195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

```

GAATTCGGCC TTCATGGCCT AATGAATTCT CATTTCCTGG AGGCTGAAGA TCTGTGCAGG    60
TGTCTGTGGC CAATGTTAAG CCTACGACTT TAGATGAGCT GGCATAAATC TTGGGAGAGT    120
TTTCTTGTCT GTGTTCCCTC TGAATTTCTC TGTGCTGTTA GAGGCAGGGA CAGAAGAGAA    180
CCAGCATGGC AGTGCTGGGC TCAGGGTGAT GCCTGCCTGC CAGCACAGCG GTTCTTGTCC    240
CTGTCCCACT TTGCTTCTTG GAAGCCTTTT TACAGCCTCA ATCATCTTGC TTTTCTACC    300
GCAGCTATCT CGAG                                         314

```

(2) INFORMATION FOR SEQ ID NO:1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

```

GAATTCGGCC TTCATGGCGG GACTTCCACT CTTTCTCGTT TTCTCGGAGC TCCGCCTCCA    60
GCTCCTCTAT CTTCTCTTTC AGCTGCGTGT TCTTCTCCTC TCTGTGGATC TCACGGCCTC    120
TTCTCTGTCT CCACGCTGGC CACCGACTCC TGCAGCGCCG TGGGCAGCCG GCGGTGCTC    180
TCCCGCCCGG TCTGCAGCTC CATCTCCAC CTCTCCCGT GGGCAGCTCT CTGCGTCGAG    240
GCCGCCTTCA GCTTGTGTTT CCCAGACTGC AGGTGCGTGT CAGCTGCAGC GGCCTGAGAG    300
GCCTTTCATC GTCCGTCCCG TTGACACTGG ATGCCGGAGT AGAAGATGGG GCTCCATGCC    360
CGGATTCTCG GGATTATTAC TCGAG                                         385

```

(2) INFORMATION FOR SEQ ID NO:1197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

```

GAATTTGCAG TGAACCGAGA TTGTGCCATT GCACTCCAGC CTGGGCAAAA GAGCAAGACT    60

```

```

CCATTTCAAA AAAAAATCTT AAAAATACGA AGTTTTTCAT TTTTCTTAAA TTTCATTGT      120
GACTACTTTA GTAGACTTGC CAGTAATAAG CCAGTTACCG CTTGAATCTC AGTTTCTTTA      180
TCTGGAAAGT GGTCAATTAT TATCTGCTGT CCCCTTACCT AGAGGGAATC AAATGCGTTT      240
GATACAGGTT CTCGAG                                                         256

```

(2) INFORMATION FOR SEQ ID NO:1198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

```

GAATTCGGCC TTCATGGCCT AGAGAGCCCA TCTCCATCTG CCAGCCTGGA AGCAGCCATG      60
GCAAATGGGA TGTGTCCAC TGCCCCCGTT TGGTGCCACA GTTGGGTTTA TTCTCACAGC      120
TGCAAACCCA CGTGCTGGGC TGCACAGCTG CCTGAACGAA GCTGGAGCGT GCAGAACAAA      180
CTGCATGGAA TGTACAGTGG GGTTTTCCAC TCTCGCCAC AGTGAGTTGG CAATGCCTGG      240
CCACGTGTGC TCTGTGTCT TTGAAGTTGA TCTGGGAGGA CAGAANTTCA AAAGGAAGAT      300
GAAGGCCCCA GCAAGGGAGG TATTCCTGTC TTGAGCAGAA GGTAAAGGTA GAAGGTGCAG      360
ATTAGGTACT GGAATAGTC ATGGTTTGGT TTGAATGGAG TAGAAGATTC CAGAGGAAGA      420
GCAGTGGGGC ACAGTGGCTC CTCGAG                                                         446

```

(2) INFORMATION FOR SEQ ID NO:1199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

```

GAATTCGCCT TCATGGCCTA AATTGTAGCT AGGAAAATAA TATATGTCTT AGTTTAAGAA      60
CTCATACTCT GGAATCAACT CATTGCACTT TCCTATATGT TTGGCCATGG GCAAAGCACA      120
TAACCTCTTA ATCAATTGGC TCGTCTCCAA GGTGAGGATA GTTATACTTA ATCCTCTTTA      180
GGAGTGAGAA TAAAAATTAA ATATGTGTGT AGCATAGTGT CTACAATGTT AGAGGTATTT      240
GAAAAGTGAT AGTTTATTTT TTGGAATTAT TTAGCATTAT TAAAAACAAG GGGGAGCACA      300
CGGTGGCACG TTTCTGTCC CAGTACTTG GGAAGCTGAG GTAGTAGGAT CGCTTGAGAT      360
CCGCTCGAG                                                         369

```

(2) INFORMATION FOR SEQ ID NO:1200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 483 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

```

GAATTCGGCC TTCATGGCCT AGACAGGTTG CTAGCTACAT GGGTCTCTGA AGAAGAGTTT      60

```



```

TCCAGCAGAA GGAGCAACTA GTGCAAAGCC CCTGAGACAC AACTGCACCT ATCCAGATTA      120
AGGACCACGG AGGAAGCCAC TGTAGGAGCA CAAAAAAGT AGGAGATGAA CAGAGAGGTG      180
AGGGAGGCTC CGTAGGTCCT AGTATGCACT TTGGCATTTA TTTACTGATT GAGATGGCAG      240
GTCATTGGAG GATTCCGAGC AGAGGAAGGA TATAATCTGA CATTTTAGCA GGATCCCTTT      300
GAGTAAGTTA GCTGCGTAGA CCTAAGATGA ACAAGGACAG CCACAGCAAG ACCTGTAAGG      360
AGACTATCCT TGTAAATCCAG GCAAGAGATG ATGGCAGCTT GGACCAGGGT AGTAGCAGTG      420
GAATTGATGA GAAGTGGTTG AAATCTGGAT ATATTTTGAA GATGGAGCCC ATGGGGTCTC      480
GAG                                                                                   483

```

(2) INFORMATION FOR SEQ ID NO:1201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 192 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

```

ACCATATAAT TTGCCACTTG AAGTGTACAA ATTCACTGAC TTTTAGTAAA TTCACAGTTA      60
TATATTCATT AGGATATTCA GAGTTATATA TTCATCACCA CAGTCACTCT TAGAACATTT      120
TAATAACCTC AAAAAGAAAC CATGCACTCC TTAGCCATCA CTCCTAACCC AACTCTCCCT      180
CTACCGCTCG AG                                                                                   192

```

(2) INFORMATION FOR SEQ ID NO:1202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

```

GAATTCGGCC TTCATGGCCT ACTTTAAACA TGTGGTCTTA CTGCCTGCAA ACACATACAG      60
ACTCTTAATT TTTATTTACA TAGATGTAAA TATACACATA TATTACTCTA AAGATAAACC      120
TTAAGGGTAA GAAAATTATA AAGTATGTGT GTTINTGTGA ATATGAATTT GTACCTATAT      180
TCAGAAGAAA AGAGCAATAT TGGCACAAAA CAAATCATCT TAATAAGGTA ACTAATTGGN      240
TGNGTGCAGT GGCTCACGCC TGTAATCGCA TCACACTCGA G                                                                                   281

```

(2) INFORMATION FOR SEQ ID NO:1203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

```

GAATTCGGCC TTCATGGCCT AGTGATCTAC TTAGGTAGCT CCTGGAAGC AAAGGAGAGA      60
GAGCAAGACC TGTACAGACT TTGTTTATGA GGAAAGCTAT ATAAGGATTA TAAGAACTGA      120
TAAATATTTC TTTGTTTCCT TTTTGACAAA ATGGATTTTC TTCAGTTTCT TAAGCAGATG      180

```

TATTATTCT GGGACGTTTT AGCCATGTAG TTTCTTTTTC TTCCTCTTTG ATACCCTGAA 240
 TAACTAGCCT TAGAAACACA AGTAAAGCTC CCAAATTTTC ATTTTCTACA TATTTTATTA 300
 CCAGATTGAA TTCTAGACCT GCCTCGAG 328

(2) INFORMATION FOR SEQ ID NO:1204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

GAATTCGGCC TTCATGGCCT AGGTCTTAAA AAGAGTAAAA GGTGAAAACA CTAAGTGATA 60
 TTCNAAACAA AAGAAAAAGA TGAAAAATAA GAACCTTGGT TAAAGAGCAG TCGAAATAAG 120
 TAATGATTAT AGCTATGATT TATATAGCAC TTNTTACAAG AAGCCAGGCG CTGTTTAAAA 180
 CACTTGACAT ACTTATTTGC TCATTTCATA ATTGTAACAA CCCTATCAGA TAGGTACTAT 240
 TTTTATCCCA CTTTACAGAG GAGAAACTGA GGCACAGAAT TTTAAGTGAT TTGGCCGGGT 300
 GCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:1205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 425 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

GAATTCGGCC TTCATGGCCT AAAAAAAAAAT GTAGTCTAGA AAGAGACTAG GAATAGAACA 60
 CTGCTGACTT GTTCTTATAC CAAGAGCTGG AGGCATAAAC AGTTTAAATA AAAAAGAATA 120
 CTTTGATCTT TTTGATGTAA CTCCCTTTA GAGATTCTGT TTCCCTGTGC TTAAATTGTC 180
 AGGCTATTTT TGATTGCTGT TTAATAAATT GGTAGTTACT ATTTGAGTCA NGCTTCTTAA 240
 AAAAAAAAAAG ATATAAAAT TCGCCAGCTC AGCTTTCATT TAATTAGTAT CAAAGAAATG 300
 ATATCTGTGG CAGTGAACAT TAGTAGCTTG TTCCAGGGTT TATTGTAGGT TTGTTCAAGT 360
 CAGTACTGCC CATCTTGCA CTTAGGTTCT TGGAATACAG AGGTGGATAA GGTTTGCCCC 420
 TCGAG 425

(2) INFORMATION FOR SEQ ID NO:1206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

GAATTCGGCC TTCATGGCCT AAGACCAGCA CCATCGTGAG CAAGATTCCT GCTGCGCTGC 60
 TTCCAAAATG GAAAAGCATC ACACTAAAT ACCTAATATC CTACCAAACA AACCACAGTC 120
 CCTACGTAGC CTTACTTCAG TCCCAGGAGA AGGAATCCAT GAATGGGCTG AGGTTCAGG 180

```

GGTAGGTTGT GGATGTCTTT CTCTAGAGGG GTCACACACC TGGAAAAGAG GACACCCAGC      240
CCGNGGGATG AGGGAAGCTG GGCAAGGGAG AAAGTTGTTG AGTCACACTG GGGACCCAG      300
ATGTAGTGAG CTCAGCAAGA AAAGCCAGGT CCAGAGAGAG TCGCACAGAA TTCCTGACTC      360
ACAGCGCCCC TCGGTCCACA GTGGAGAGGA GGAGGAGGAG GAGCAGAAGG AGGGGGAGGA      420
GCTGCAGGAG GAGGAGGATT TGAAGCGCT TTGGCCTTGT GTTATGTTTT GCTTCTTTTC      480
TGTGCCCCCCT TCTAGGCCAT GAAG                                         504

```

(2) INFORMATION FOR SEQ ID NO:1207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAAATTTTTC AGTAACTCAG TGTCTTTAAC TAATAATTGA ATCATTCTAG TAAGAAAAACA      60
TGCTTTGTAT GATTTTAGTC TTTACATTTA TTAATTTATG TAAATTAATA TGTGGGTTTT      120
ATGATCAGCC ACGACATTGT CCTAAGTTGT CGACTGTTCT GTGTGCTCTT TTAAGAAGG      180
TAGTCTGTG GCCGGGTGCG GTGGCTTACG CCTATAATCC CAGCACTTCG GACAGGCTCG      240
AG                                         242

```

(2) INFORMATION FOR SEQ ID NO:1208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

```

GTAGAATTGT ACAGTGCTTA TGAGTTATGC ATGTGTTTCT GGTCTTTGTT CTAGGATTTT      60
TTTTTTTTTT TGATTGCTGC TCCAGTTGCC TTACTTACTT TGACATTGGA GTTGACCACA      120
TGATGGTGTT CCACACTTCC CCTAGGCTCG AG                                         152

```

(2) INFORMATION FOR SEQ ID NO:1209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

```

GAATTCGGCC TTCATGGCCT ACTACCCCTT TATCATTCAC TAACGTGAAT GTGGTGCTAA      60
TTTTCCAGT CCATATCTTT GAACTTTTGG TAATATATGC ACATCAATAA GCAATCGAGT      120
TTTATCTATT CTAATTGTTT TAATGTACAA CTTTATGGGT ACATGTGCAA TTTTGTCTCT      180
TGCATGGTGG CCAAATCAGG GCTTTTAGAA CATCCAACAT GCGAATAATG TACATTGTAC      240
CCATTAACTA ATTTCTCAAT ACTTCTGAGT CTTCTTGTG TATGATTCCA CTCTCTACAT      300
CACATGTACA CCTCGAG                                         317

```

(2) INFORMATION FOR SEQ ID NO:1210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

```

GACAGATTTC ATTACCTTGA AGTTCACCTGC ACTGAACAAT TCTCACTCTG GATGTATTCC      60
TGCTCTAGGA TGTGAATTTA GACTTTTGTA ATAGAGTGGG CTTTGAGAAA TAGCTTTTCT      120
GCTCATTTTA GTTTCATGAT GACTGCATGG AATGTTTTCG TTCACGCTTA TGCATTGAGT      180
TTTATCAAGC ATTAAGCAGT TGGCCGAAAC AGGTAATACT TGAACATTCA GTCCAAGAAA      240
AACAAAATGG ATTTGAACAT ACGTAGAATC AGTAAACTCG AG                          282

```

(2) INFORMATION FOR SEQ ID NO:1211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

```

GAATTCGGCC TTCATGGCCT AGTCAAACCC TAGAGCAATG CAGGCCTTGT TACAGATTCA      60
GCAGGGTTTA CAGACATTAG CAACGGAAGC CCGGGGCCTC ATCCCAGGGT TTA CTCTGG      120
CTTGGGGGCA TTAGGAAGCA CTGGAGGCTC TTCGGGAACT AATGGATCTA ACGCCACACC      180
TAGTGAAAC ACAAGTCCCA CAGCAGGAAC CACTGAACCT GGACATCAGC AGTTTATTCA      240
GCAGATGCTT CAGGCTCTTG CTGGAGTAA TCCTCAGCTA CAGAATCCAG AAGTCAGATT      300
TCAGCAACAA CTGGAACAAC TCAGTGCAAT GGGATTTTGG AACCGTGAAG CAAACTTGCA      360
AGCTCTAATA GCAACAGGAG GTGATATCAA TGCAGCTATT GAAAGGTTAC TGGGCTCCCA      420
GCCATCATAG CAGCATTCTT GTATCTTGAA AAAATGTAAT TTATTTTGA TAACGGCTCG      480
AG                          482

```

(2) INFORMATION FOR SEQ ID NO:1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

```

GAATTCGGCC TTCATGGCCT AGGGTGATAT TTAACCTGTT GCCAATGGCT AAGCTCCAGA      60
CTTTGCCTCT CACACTTGGA GGGATTCCCT GCCACCATAA ATCTCGAACT TTTCTAGAGC      120
ACCACATTGT TTCCAGTTA GGTAAGATCT CATTATTCCA GGTGAGCACA GCGTTTCCAA      180
TGCTTTCCTC GACTCTGCAT CTTTCTTCCA GCTGCTTCTT CCTTCGCTGG GCTTCTTCA      240
GCTCTCGCTT TTTGGCCTGA ACCACCATTT CTTCACTACT CTGTCTGTGC TTCTGAGCTT      300
CTTCAGCTGG TTTTGCTGGG AGATTGCTG GTCTGTCCTC GAG                          343

```

(2) INFORMATION FOR SEQ ID NO:1213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

```

GAATTCGGCC TTCATGGCCT AGAGAACTA AACTCAGAG AAGTTAATTA CTGAACTCAA      60
GATCCCAAAG TGCTGGGATT GCAGGCGTGA GCCACCGCGC CTGGCTGAAA GAGCTTTTTT      120
AATGTATTAT TTATTTGTGT CAGGATAGAC TCATTGATGC GTGTTTTATT CAGTGGGTTA      180
TAATTCTTTA TTATGTATTC TGATGTTGGT GTTTTCCCAG TTTTAGCCAA TGGCATCCCC      240
TTCCATCTGG ATCCTGTGTT CTTTGACAT GGCTCCAATC TCGAG                        285

```

(2) INFORMATION FOR SEQ ID NO:1214:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

```

GAATTCGGCC TTCATGGCCT AGAACCAGGC CTTCCAGTAC GAGTTTGAG CCATGTATGC      60
ATGGATGCTG TGTGTCTTCA CTGTCATCGT GGCCTACAGC ATCACTTGTC CCATCATCGC      120
GCCATTTGGC CTCATCTACA TCCTGCTCAA GCACATGGTG GACCGGCACA ACCTCTACTT      180
CGTCTACCTC CCAGCCAAGC TGGAGAAGGG GATCCACTTT GCCGCTGTGA ACCAGGCCTT      240
GGCAGCCCCC ATCCTGTGCC TCTTCTGGCT CTACTTCTTT TCCTTCCTGC GCCTGGGTAT      300
GAAGGCCCCC GTCACTCGAG                        320

```

(2) INFORMATION FOR SEQ ID NO:1215:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 446 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

```

GAATTCGGCC TTCATTTTGA AAGATATTTT TGTAAAAATC TGTTTGTTTT CTTTAAATAC      60
TTTCCAGTGT TATCTGGGTT TCTTAATTTT TGACTTAAGG TCTGTAATAA TTTCTGCTTT      120
CATTCTCTTT AATATATTGT GTCTTTCTTT GTCTACATTT AAGATTTTAT CTTTATCACC      180
TGTTTGAAGA AGTTTATTTT TGATGTGCTC TTTATGTTTT TCTTTATTTG TAGTGCTTGG      240
ACCTTGTTGGT GCTTTTCTTA TTTATAATTT TCATCAAATT TGGGGGGTTT GACCATTATT      300
GCTTCAAAAA TAATCTCTGT TCTCTTCTT CACTTCTCC AGTTACATAC TGTAAGATAA      360
ATGATAGCTA CCGAAGACAG AGTGATCCGT GATAAATATC ATTAATGCCT CTGAAGAGGA      420
GAATGACTCC AGTGAACCA CTCGAG                        446

```

(2) INFORMATION FOR SEQ ID NO:1216:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

```
GGACTTTTGG GAGAAGCAGT ACTATTCATT AATTAAGTAT AGAGTGTCTT GTTAATCCTA    60
AAAGAAAGAG AGCCTTAATG AGGATCATGA ATTTT TTTT TTTT TTTTGGGATG    120
GAGTTTCGCT CTGTGCGCT AGGCTGGAGT GGGGTGCTAT CTCTGCTCAC CACAACCTCA    180
GCTTCCTGGG TTCAAGCGAT TCTCCTGCCT CTGTCTCCCG AGTAGCTGGG ATTACAGACA    240
TACGCCGCCA TGCCCAACTC GAG                                           263
```

(2) INFORMATION FOR SEQ ID NO:1217:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 325 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```
GAATTCGGCC TTCATGGCCT AAACAACAAC AATAACAACA AAAAAACAT GTATAACTGG    60
GAAAAAAGTG AAAGAGAATG CAGGATCATA AAAATATAGC AAACAAAGTG AGTGGGATTT    120
AAAATTAGTG GAATAAGAAA TAATGGGTAA CAATGAAGAA CATAATTTAG GTAATAGTAT    180
AGTATCTTGG GAGCCCTCCT GGAAGTATCT AGTTATGGAC AGTGAGCAGC AGAACAGGA    240
TGTAACCAAA TTCAGCATAA TTGATGGTTG TGGTAACCCT AGAAAATGAC TCCAGGAAAT    300
AGGTGAGAAT CCAATCTATC TCGAG                                           325
```

(2) INFORMATION FOR SEQ ID NO:1218:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 293 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```
GAATTCGGCC TTCATGGCCT ACAGAGATAG GGTCCCATCC AGGTTCTTAA CTGGGTGGCA    60
CATGCATGGG CTAGATCCAA ATAGCATTGC AAAGGCCTGG AAAACAGAAC TAGAATTGAA    120
ACCACCGCGG AAGACTCATT CGAACTCGTG GGCTGAACTC AACCAGGTCA ATGCTTCAGA    180
AAAATACCAG CATTCTCCAC AGGACATAAA CAAGATTGTC TCATAACATA CCATTCAAAA    240
TATTAGGATA CAATCAAAA TTGCTCATCA TAAGAAGACA GGAAAACTC GAG                                           293
```

(2) INFORMATION FOR SEQ ID NO:1219:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

GAATTCGGCC	TTCATGGCCT	ACGAGGATTG	GGGTAGGTAT	GNGCTTNGG	CTCATGTTTG	60
TGATGATAAC	TGAAGTCTNT	TGTGGGTCCG	ACCTGTTGTA	GGGTGTGGGG	GAAAGTGAAG	120
GAAGAGAATG	AAGGTGAGTC	CCCGCCGTTG	CAAACCTTCA	CCAAACCACG	CGGCCACGTT	180
TTCGTGAGTA	CCCCTGTGTC	CCAGAGAGGA	GGACCCAGCG	TCCTCGGCTC	TGCCGCAGGC	240
CTTCTTGSTC	TGGTGGGTAC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

GAATTCGGCC	TTCATGGCCT	AAGGAATTGA	AACCCAGTAC	TTTGCAGAAC	TTCTTATGAC	60
TTCTGGAGTG	GTCCTCTGTG	AAGGGGTCAA	ATGGTTGTCA	TTTCATAGCG	GTTACGACTT	120
TGGCTACTTA	ATCAAAATCC	TAACCAACTC	TAAC TTGCCT	GAAGAAGAAC	TTGACTTCTT	180
TGAGATCCTT	CGATTGTTTT	TTCTGTGCAT	TTATGATGTG	AAGTACCTCA	TGAAGAGCTG	240
CAAAAATCTC	AAAGGGGGAT	CTCGAG				266

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

GAATTCGGCC	TTCATGGCCT	AGCTCATTCT	GCTGGGGGTA	GAGATGAGGG	GAGGGAGTAA	60
GTAAACCTT	GGACTAGCAA	GTAAGAAGCCT	GGGGGGATGC	GTGTGCCTCA	GTTCCTCCT	120
CCACAAGTGA	ATATAGTGGC	TGAAAAGTGG	GGAGATACTT	GATGGCGCGA	ATGTCCGTTT	180
TCTCTCCCTT	CCCACCTCCT	GCAGGAAGCA	GGACGGGGCA	GGCAGCACCT	GGTAGGCACA	240
GTGCTTTGCC	CCTCCTCCCC	TTCCCTTCTG	GAAGTCTTGG	GGCCTCAGTG	CTTGCAACAG	300
CCACTCCTCG	AG					312

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GCGATTGAAT TCTAGACCTG CTGGCCTCAA GTGAACCTCC CGCCTCGGCC TCCCAACGTG      60
CTGGTATTAC GGGCATGAGT CATTGTGCCC AGTCACAGAA TTCATTTTAT TTGTGAAAAT      120
ACAGTGGTAC AAGTAGGCCT TTGTTAAATG ACTAACCTGA AACCTCTTGT GAATGACAAA      180
CTCCTCTCTA CTCCAAATAC TGGCCCATCC CTGCTTAAAT ACTGCTCAAT GAAGTTACTC      240
ATGCTAGTTC TTGAGGGAGT AACTCTAGAA TGATTCCATC TAGGAAGACA TAAGATAAAA      300
TGGTAAGTAT TCTAAGTTCT ATAGGTAGTT TAGTCATGCC ATATTATAAA CCTCCACTCC      360
AAAAATAGTG TGAGGTCATT TCTGGCCAGA GTGAAATAAA AAATGTATAA TGCCTGAACA      420
GTCTATTATT CTGACAATGA AAAAGATTAA TGCAGTTCCC TTTATCACTT GCATGAGTAA      480
AAAAATATAT ATATATATTG GCTGGGCTCG AG                                     512

```

(2) INFORMATION FOR SEQ ID NO:1223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

```

GGGTGTTTCA TACAAAGAAT ACAAGTAACT GATGAATGAA GGGGGCATCT TGTGTCCCCA      60
CAATCCTGCT GTGCGCACAC CACAGGTGAG CCGTTCTGCC TAAGGGAACA GCCCCGGCCC      120
CTCCCTCCGG CTCCTCCCCA GCACCGTCTC CTCCACCCAG TGGCCTGGCC GTGGATGCTG      180
CCTGTGGCCC AGCTTTGAGA CACCGCCCTG ACACGTGTCC AGCCTTACGT GGAAGGATTT      240
GTCTGTTTGG TGGCATCCTA GTAGATGCCA CGTTAGTAGA TGCCATGTTA GTAGAAGGGA      300
TGTGGGCATT TCTTTGTAAG TTCCCAAAAG CCTATGAGGG TTTTTCAC GATTCCGTTT      360
CCAGTTTGGC TTTTGTGTT GTTGTGGCTG TTCTTGCCCC CCCTGGGCCC TGCAGTGGAG      420
TGGGGGGCTG CACCTGGGAG CCTCGAG                                     447

```

(2) INFORMATION FOR SEQ ID NO:1224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

```

GAATTCGGCC TTCATGGCCT ACTTTGTTTT ATATAATAAA GTATGCCTGT TATATTAAAT      60
AATAAGAATA TGGCAATTAG CGATATAGCA TACCCAAACA AAGATGTTCT CGATACAGTC      120
TGGCAAAGAC TATCCCAAGG TTATTTTAAT GAATTCAGAC ATTTTTCCT GTGGATATTT      180
CTCCATCCTA AAAAAAGTGG CAACCAAGGA AAATATTTAG ATGCAAATAC TCGAG          235

```

(2) INFORMATION FOR SEQ ID NO:1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 134 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACT GACGCCGCAC CATGACCCCTC CTGCTGCTGC      60
CCCTTCTGCT GGCCTCTCTG CTCGCGTCCT GCTCCTGTAA CAAAGCCAAC AAGACAAGC      120
CACCGCATCT CGAG                                     134

```

(2) INFORMATION FOR SEQ ID NO:1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

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GAATTCGGCC TTCATGGCCT ACACACATCT GGTAAGCAGA AGCACGGAAG GCCTTTGTTT      60
CAGACAACTCT TTTAAATGAT GTTTGTATAG GGAACAGCTT TGGAGATAA AGAATGCTCTC      120
TCTCTCTTAT GGTTTGAATG TGTCTCCAAC ACTTTATGTG TTGAGACTTC ATCCCCAGTG      180
TAACAGTATT GGGAAAGTGA GCCTTTAAGA GCTAATTAGG TCATGAGGAC AGCTCGCTCA      240
TGAGTTGACT AAAGCTGATA ATGTGGGAAC GTGTTGGTTA TCACAGGAGT GAGTTCCTGA      300
TAAAAAGAAT GAGTTGGGCC AGATTGTCTC TGTCTGTCTC ATCTGCCCTGC TTCCACCTTC      360
TGTACTTCCA CCTGGAATGA CCCTCACCAG ATGCTGGTGC CATGCTCTTG GACTTCCCAG      420
CATCCAGAAC TTCTGTTTTT ATAAATTACC CAGTCTATGG CATTCTGTTA TAGCAGCAGA      480
AAATGGACAG AGACACCCTC AAATTAAAGG ACAGTCTTGC TGACTATGAA TTAGAAAATA      540
TCTGGGTTAG CTCGAG                                     556

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(2) INFORMATION FOR SEQ ID NO:1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

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GAATTCGGCC TTCATGGCCT ACCTGCCTCG AAATACTACC GTATGGCCCA CCATAATTAC      60
CCCCATACTC CTTACACTAT TCCTCATCAC CCAACTAAAA ATATTAAACA CAAACTACCA      120
CCTACTTCCC TCACCAAGC CCATAAAAAT AAAAAATTAT AACAAACCAC TCGAG          175

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(2) INFORMATION FOR SEQ ID NO:1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

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GAATTCGGCC TTCATGGCCT ACTGTTTCCT TGCCCTTTTC ACCGTCTGGT GGTTCCTGTC      60

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AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC 120
 TGTCATCACA TCGCCTTCTC TTGAGAAAGA TCCCAGGCTG GTATTTAAAT TGCCTGTTGG 180
 CAGGAACTTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG 220

(2) INFORMATION FOR SEQ ID NO:1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

GAATTCGGCC TTCATGGCCT AAGTCTCTTG ACATCTCAAT TTACCCGAGA ACATCTCTAT 60
 TTAATTATTC CCTGAGGAGG GGAAGTTGGG TATGGCGGTT GGAGGTGGAC AGGCTCCTAA 120
 CAAGCACTTG CCAGCAGGGG GCACTCCAG TTTTCGCTCC GCTGAGTCAC CCAACCCCTG 180
 AGGCTTCGCC ACTTTCTAAT GTTTGCTGTG GCTACAATGG TCAGACCCAC AGGCAAAAAA 240
 GTCGAAGTCC CTGGAGTCCC TGACCCCTCT TCCTCTCTAT AACGATTGGA AACTGTCCAA 300
 ACCAACTCCA GTAGTTCTGG GCTGATGAAT CATCCTCTTG TGGGGCGGAG AGTGGGGGTA 360
 GGGTGGAGCA ATGTGGGCTA GGACCCAGGG CAGGATCAAA ATCTCTGAAG ATGCAGAGCT 420
 CCCTCTGCCC TGGGAAGAAG GAAGCAGGAT TTATTATAAC ATTTAGCTCA CTGTCCAATC 480
 GACTAAACA AGCTCTCCCA GGGCTCGGGC CAACTGTCGA CTCGAG 526

(2) INFORMATION FOR SEQ ID NO:1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

GAATTCGGCC TTCATGGCCT ACCATTGGGC TATGACCTGA GGAGAATCAA GGTAGCTTTC 60
 TCAGGCCCTCG TGGACATCGT GGATATAAGG AATGCTCTCG TAGGAGGGTA CAAGAACCCC 120
 AGCATGATTC CAATAGAGAA GGCCCAGGGG CCATCCTGC TCAINGTTGG TCAGGATGAC 180
 CATAACTGGA GAAGTGAGTT GTATGCCCAA ACAGTCTCTG AACGGTTACA GGCCCATGGA 240
 AAGGAAAAAC CCCAGATCAT CTGTTACCCT GGGACTGGGC ATTACATCGA GCCTCCTTAC 300
 TTCCCCCTCG AG 312

(2) INFORMATION FOR SEQ ID NO:1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

GAATTCGGCC TTCATGGCCT AGCTTTATCC ACTCTGGAAT CCTGGAGGAG CCGCTACAAC 60
 CAAGTTGTAA AAGAAAAGGG AGACCTTGAG NTGGAAATTA TTGTCCTGAA TGACCGGGTA 120

ACAGATCTTG	TAAACCAACA	ACAAACCCTG	GAGGAGAAGA	TGCGGGAAGA	CCGGGATAGC	180
CTGGTGGAGA	GACTACACCG	TCAGACTGCT	GAGTATTCCG	CATTCAAGCT	GGAGAATGAG	240
AGGCTGAAGG	CCAGCTTTGC	TCCAATGGAG	GACAAACTCA	ACCAGGCACA	CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

GAATTCGGCC	TTTATGGCCT	ACGCAGCTCT	ACCTGCTCCA	GGGGCACCTG	GACCTGTGTG	60
AGCAGCACTG	TGCCATCCTC	CTGCAGACTG	AGCAGAACCA	TGAGACCGCT	TCTGTGAAGT	120
GGAAACTTG	AAGACATTCC	TGCCTTCTTT	GAATTGGCCA	AGAAGGTGTC	TAGCCGGGTG	180
CCTTTGGAAC	CAGGGTTCAA	TTACTGCAGA	GGTATCTACT	GCTGGCACAT	AGGGCAGCCC	240
AACGAAGCCT	TAAAGTTCTT	GAACAAGGCA	CGCAAGGACA	GCACTTGGGG	CCAGAGCGCC	300
ATCTACCACA	TGGTGAGAT	CTGTCTGAAT	CCAGACAACG	AGGTTATGGT	GCGGCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

GAATTCGGCC	TTTATGGCCT	AGAAGGACTG	AAATGATGTT	ATACTAAGGG	CTACTGAACT	60
TTTTGCCTGT	TCCTTCCAGG	TGTGACAGCC	TTTTCTTTTC	TTTCCAGGTG	GTTGCTTTTG	120
AGGTGGTCTG	AAGCCAAGGC	CTCGCGGAGC	TTCTTTGTGT	GTCACTTGC	TTCCACGTTT	180
CAGTTCTTGT	TTTGTCTTA	CTGCTTTAGT	TTTTTTTAAA	GTTCTCCAGT	GTCCCAAGA	240
GGTATTAGAA	TCTTGCTGTA	CCCAAGCAAG	ACGTTAATTT	TTCTTTTAAC	TGTTTTGGGG	300
AGGGAGGGAG	TGATAGCTTA	ACTGCTGAAG	CCAGGCGGGG	GTCTGCTGGA	GGATTCCAAC	360
AGAGAGTATT	TCCTCCACTG	TACAATGTCA	CAGACTATCT	CTATCATCAT	TGCTTTGTGG	420
CAT						423

(2) INFORMATION FOR SEQ ID NO:1234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

GAATTCGGCC	TTTATGGCCT	AGCATGTAAA	ACTTCAGTCC	TGAACATTTA	TAGGGTTTTA	60
TAGAAGGGCA	TCCTCCAGGG	CTGGTCCATT	CAGAGAAATG	CTGCATGCTG	CCGTCATGGA	120
ATGTGGCCCA	CAGGACACCA	GAGCCGTGAG	AACCGGAGAG	CAGACTTCCC	TCACGGCTGG	180

GCTGAGCAAA CCCTCCAAAG CCCTCCTCAC GCAGTTACTA ACAATAGCAT GGGCTTACAG	240
CACAAGCACG TGTTCTCACC TTTTCCTAT GCCCTGGACT AAGGTTTGGC CAGTGTAATC	300
ATATAAGGCC ATCCTGACAT TGTTCCTGTG TTTCAAAATT TGGATTTTTA TTTACATTAG	360
AACATACATTG CTCCTAGTAG AACATTACCT TTAGGGGACT AATTTCCAT GGAGAACTAT	420
TTAGCATAT TGCATGCTGC TCAGACCCCA AGTCAGATAT GCCCACAAGC TCGAG	475

(2) INFORMATION FOR SEQ ID NO:1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

GTTTTGAGCC TAGTAGCACT ACCTTCCAAG TGAGTCACAA CAAATTTGAT CCTATTGGT	60
ATGTTTTTGT CCACTGTTAT GATTNATCAT GTATCTTACA AGAGCCACTC AAGCAAGACT	120
CTGCTTCTAT GTATGGTGAG GCCTNGTTGT TCTAGGCTAG AATAAACTCT TTGTATGCCT	180
CATTGAATAT GCCAGGTAAA ATTTATGCAG TCAAGAAATGA ATTATTTTTC TGAATAAAGT	240
GTGTAGCAGT AGTTCAAAAT TGTGCCCTTG TTTTAACAGT TTCTGTGNAC ACCTTCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

GAATTCGGCC TTCATGGCCT AAGAGAAGAT AACATTTACA AGTAAACAGT AAGTGCAATT	60
GTATTTTAAT TTCTTGGTCT CCGAAAACCT AGCTGTGACT GCTTTCCATT AACAGTTCCA	120
GCTCTATGTG TTTCTCTAA CGCTAAAGGC ACAGCCCCG GGAATCTACT GCTTCCTAAG	180
AGTCTCCATG GAGTCTATTT TACAACCTCC TTCCCTCCA TGCTCCCGG GAGGAGTCTA	240
TACTATCTCT ATATACACAT TTTAAACATT ATTCTTCATT TGAAATTCCT TCAATAAAAA	300
CACAGTCACC ATTCTTCATC TTCTTGGGAA ATGGCCTGCT CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:1237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

GAATTCGGCC TTCATGGCCT ACTCACTATG TTGCTCAGGC GGATGTGGAA CTCCTGGGCT	60
CAAGCGATTG TCCTGCCTTG GCCCCCAAAG TGCTGGGATT ACAGGTGTGA GTCATGGCAG	120
CCACGGCTCC AGAGCTCGGG TTCTTAATCT GGTCTGTGGA TGGCCCCTGG GGGCGGTCCC	180

ATGAGCCCTT	CACAATTGGA	CACAGTTTGG	CAAAGGGGTA	AAAGGACAAG	AATCGGTAGC	240
TGTGACTGTG	GATGAGCCTC	TGAGCTTCAC	TTTCCCTCCC	TGAAAGGGGG	TGACAGTGGC	300
ACCTCCCTGG	AGGTTTTCGT	GGAGGGGAGG	AAACACATGT	AAAATACTTC	ACCCC	355

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 560 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

GAATTCGGCC	AAAGAGGCCT	ACTAGACCTG	ATCACCACGT	TCAAAAAGTTG	GCTTTCTCCA	60
TTTAAAGTTC	TTCCTTAAAG	CCTCTTTAAG	CAAAGTCCCT	GAAATGATAC	AGTAGAAAAA	120
TCACACAGAC	TTATTTAAAA	TGAATTCTAT	CACTATTCCT	GAGATCTCGC	CTGCCCCACT	180
GAGGACATTT	TGTTTTTCGA	AAGTGCTTTG	AAATGTGATA	AAGGATCTTA	AAGAATATTT	240
GTAAAATTAT	GCCCAAAGAA	GACATTCTTT	GAGGTTAACT	TGCAGTGTCT	AAAAGTCAAG	300
AATGAGGAAG	GAAAGGAAAA	TAACAGATTC	ACTTTAAAAT	GGACCACGCT	AATTGGGCAG	360
TGAAACATCC	TTGTGTCACA	CCATTACCG	TAGCAGACCA	GAAGAGGGAA	AAGGCTTGAT	420
TTTTCTCTCA	TAGATACCAC	AGTTCACTCT	CAAAAACATT	CCTAAAATGG	ATTGATATTT	480
CTCTGATAGA	GCACCTGTTT	TGCTACTGAC	AGTGTTAAGT	TCCATACTAA	TCAGCTCATC	540
TAGCCTAACG	ACAACTCGAG					560

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 569 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGNC	AAAGAGGCCT	AAGGAGAANG	AGGCTCAGAA	GGAGACGATT	AAGGATCTTC	60
CCAAGATGAA	CCAGGAGCAG	TTCATTGAGC	TGTGCAAGAC	GCTTTACAAC	ATGTTCAAGT	120
ANGACCCCAT	GGAGCAGGAC	CTGTACCACG	CCATCGCCAC	CGTGGCCAGC	CTCCTGCTCC	180
GCATCGGAGA	GGTGGGGAAG	AAGTTCTCAG	CCCGCACAGG	CAGGAAGCCC	AGGGACTGTG	240
CCACTGAGGA	GGACGAGCCA	CCAGCACCCG	AACTGCATCA	GGACGCAGCC	AGGGAGCTTC	300
AGCCCCCAGC	TGCAGGAGAC	CCCCAAGCCA	AAGCAGGCGG	AGACACACAC	CTCGGAACAG	360
CCCCACAGGA	GAGCCAGGTG	GTGGTGGAGG	GGGGCAGCGG	CGAGGGACAG	GGCTCACCCCT	420
CCCAGCTGCT	GTCTGACGAT	GAAACCAAAG	ACGACATGTC	CATGTCCTCC	TACTCGGTGG	480
TCAGCACGGG	CTCCCTGCAA	TGTGAAGACC	TTGCAGACGA	CACGGTGCTG	GTGGGCGGGG	540
AGGCCTGCAG	CCCCACAGCG	CGACTCGAG				569

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

GAATTCGGCC	AAAGAGGCCT	AGAGACCAGC	CTGGCCAATA	CGGTGAAACC	CTGTCGCTAC	60
TAAAAATACA	AAAATTAGCC	AGGCATGGTG	GCTCACACCT	GCAGTCCTAG	CTACTTGGGA	120
GGGTGAGGCA	GGAGAATCAC	TGAAGCTTGG	GAGGCAGAGG	TTGCAGTGAG	CCAAGATTCC	180
ACCGCTTCCC	TCCAGCCTGG	ATGACAGAGT	GAGACTCCGT	CTCAAAAAAA	CAAAAAAAA	240
GTTACTTCAA	TAATGTACTT	TTTTTTTCA	AATTACAGAT	AATCTATAAG	GAATTAATCT	300
TGAAATTAAT	TCCAGGTTTA	ATTGTTAATG	AAATTTCACA	AGCCTAATTT	AACACTTGTC	360
TGGATAACTC	ATTTTGATAC	TGAGTAAATA	GTCACCGGTC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

GAATTCGGCC	AAAGAGGCCT	AGGGCTTTTG	TGAATAAATT	TTAAAAGAGA	CTACTGCCTG	60
TCCTTAAATT	CCTTTTCTT	TTTATAAAAA	AAGAACTATT	AAAAATGATT	GACAAATTTT	120
GAGTTAAAAA	ATTGTTAAAA	CATTCTCTAT	ATTTAATTTT	AATTTTATAA	TAGATTACAG	180
GAAGATGCTT	ATGAAACAAA	TACATTTGTT	TCAGTACATG	TCTTTAAATG	ATAGACTTAT	240
AAGTATGTAA	ACAACTATAT	AATAAAAGGT	TTCCAAACGC	TGCCTGTAAG	AAATCAGGCA	300
AATTTTACCA	TAAGCAATAA	ACCATTCCAA	GCCTTCCAGA	CAGTCTCCAT	AGCCGCACCA	360
GCATGGCAAT	AAGCTTTAAC	CAAACGAAAA	CAAACAAACA	AAAGCACTTC	GCAATTTGTT	420
GCTGCAAAAC	AGGGAGAGAA	AAGAGTGTAC	AAACTTGATG	GAATCACAAC	AGTCAATATA	480
ATTTAAGGGA	CAATAAAGTC	AATAAGGTTG	ATGGTGTTTA	TTGTTTAAAA	AGTTAGGCCT	540
CT						542

(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

GAATTCGGCC	AAAGAGGCCT	ACTGATACAA	TTGTTGACTT	TTCTTTTACT	ATGTGTAAGA	60
AATACCCCAA	ACATGAAAAG	ATTGTTTGA	TCATATGCAT	GTATGTAGAA	TATTTTGA	120
GAGCAGAAAG	ATTATGTTAG	AAGTGTGATT	TTTATTTTCA	GAAGTCATAT	ACATGTAAGC	180
TACAATTTTG	AGTGCTTTAT	AAACACTTAA	GATATATATA	TAAATTTTAA	TTTCATAGCA	240
ACTTGTAATA	AATAAAATAC	TTGTTGAAAA	GCCTTTTTC	ACATATCCCT	AAGCTAAGGG	300
AAGAGGAAGG	AATAACAAC	CAGTGAAAAG	ATGGTCTCCA	GTTTCTGAAT	GAAAAAGCTA	360
CAACCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:1243:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

GAATTCGGCC	AAAGAGGCCT	AGCCTCATCA	CGGGCAGGGC	TCTGGCCCAT	AGTGGCTGGA	60
CAGACACTGG	CACAGTCTTG	CTGGTCTGCT	GGGAGCACAC	AGACATTGGC	ACAGACTTGC	120
TGGTCTCTTG	GAAGAGGGCA	AGACCCCAAA	CCAGAGCAAA	ATACACTTCC	AGCTCTTAAC	180
CAGGCTCCTT	CCAGTCACAA	GTGTGCAGAA	TCAGAACAGA	AGTAGTACCA	ATCAATGTCA	240
CATGAACAAA	CAAGCTGCCC	CCAGGGTACC	ATTTGGGGAG	GGGAAATCTT	TTCTTTCTTT	300
CCCCCTTAAA	AAAAACACA	TCTGCCCGA	ACACTTCCC	ACTGTTATTC	TTTCTCATA	360
CCCCAACGCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:1244:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

GAATTCGGCC	AAAGAGGCCT	ACACACCAAA	CTGATTATCC	ACCAGACACT	CAGCGTCTTA	60
GAAGATATTG	TGGAGAATAT	CTCGGGGGAG	TCCACCAAGT	CTCGACAGAT	TTGCTACCAG	120
TCGCTGCAGG	AATCTGTTCA	GGTCTCCCTG	GCCCTCTTTC	CAGCTTTTAT	CCATCAGTCA	180
GATGTGACTG	ATGAGATGCT	GAGCTTCTTC	CTCACTCTGT	TTGAGGCGCT	TAGAGTACAG	240
ATGGGTGTGC	CTTTCACGTA	GCAAATCATA	CAGACTTTCC	TCAACATGTT	TACCAGAGAG	300
CAGTTAGCCG	AGAGCATCCT	CCACGAGGGC	AGCACAGGCT	GCCGGGTGGT	GGAGAAGTTT	360
CTGAAGATCC	TGCAGGTGGT	GGTCCAGGAG	CCAGGCCAGG	TGTTCAAGCC	CTTCTCCCC	420
AGCATCATCG	CCCTGTGCAT	GGAGCAAGTG	TATCCCATTT	CGCTCGAG		468

(2) INFORMATION FOR SEQ ID NO:1245:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

GAATTCGGCC	AAAGAGGCCT	AAGCTTATGG	GGAGGACACA	TATTTACTCA	AACATCCTGG	60
CAATTCATAT	CTAGGGCACT	CCCTCTGTGT	GTCAGACGCC	CTTGCATGTG	TCAAATGTCA	120
TCTGATAACA	TTGATGAAAA	ATATCATTC	CTTCTTCTTG	GTGCAGAAGG	CATAGACCGG	180
ATTATGCAAT	CACTGAGAAG	TAGCTTCTGG	ATGTGTTTTT	TGGTGGCGTC	TTAACAATTT	240
CAGCCGACTG	AAGGCTCTTG	GACACTTGA	ACATTGTAG	GGTTTCTCTC	CGGAGTGGAT	300
GCGCTGGTGC	TCCTTCAGGC	TCCCCCTGTA	GGTGAAACT	TTCTTGACAGT	CTTTACATTC	360
GAAGGGCTTC	TCCCCCTGTG	TGGCTTCTCT	TGTGACACTT	CAAGTAGGAC	TTCTGGGTGA	420
ACTGCTTAGG	CCTCTTTGGC	CGAG				444

(2) INFORMATION FOR SEQ ID NO:1246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

```
GAATTCGGCC AAAGAGGCCT AGTATTTTGT ACTAGTTTTT TAATAATTAT AAGTCTTACA      60
CGTTCTCTAA TTCTTCTTGA ATCTGTTTAA TTTTCTCTCC TTGGGAATTG TTAAGTGTAC      120
ATGTATTGTG ATAACGTCTA TAATTTTGCT TTTATTGATT TTTTGTGCTT TATATCTGCT      180
ACAATTTGGT TCCTCCAAAT CCCATGTTGA AATCTGATCC CCAGTGTGTC TGGGGGATCT      240
AATAGCAGGT GTTTGGGTCA TGGGAACAGG TCCCTCATGA ATGAATTAAT GCCCTCACTG      300
GGAGGAGGGG ATAAGTAAGC TCTCACTCAT TTAGTTCCTA AGACAGCTGG TTGTTTAAAA      360
GAGCCTAGTG CCACCTTCTC CTGCTTCCTT TTCTTGCCGT GTGATCTCTG CACATGCCAG      420
CTCCCCCTCA G                                     431
```

(2) INFORMATION FOR SEQ ID NO:1247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

```
GAATTCGGCC AAAGAGGCCT ATTTTITTTT TTTTITTTT TTTTITTTT TCNGGGTGTA      60
GAACATTAT TATTTTTC CACAAATCAC TGAAAGTTA GGTCAAGTGG AAATAATTTT      120
AATCAAATAA TTGTACATAT TCTTCCCACA TATCCTGCCT TGTATTAGGA AATGACATTG      180
TGATCCATTT CATTACAAGT AAAATATTAC AAAATATTTA CAGGAAAAATA TTAATAATAA      240
CTCAACACACA AAAGGCAAGA TGAAATAAAC TGTTTTTTT TCTCCAGAAA TCTCTACTCC      300
AGTGCCACACA GCACACAAGA GTCAAAACAA ATAAGCAACT AAGATCCCCC GATCACAAT      360
TTCAAAGAA CTAGGCCTCT TTGGCCGAA                                     389
```

(2) INFORMATION FOR SEQ ID NO:1248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

```
GAATTCGGCC AAAGAGGCCT AAAGGAAGGC CACTTCTCAA CTGGCAGAAC TTCTGAAGTT      60
TAGAATTGGA ATTACTTCCT TACTAGTGTG TTTTGGCTTA AATTTTGTCT TTTGAAGTTG      120
AATGCTTAAT CCCGGGAAAG AGGAACAGGA GTGCCAGACT CCTGGTCTTT CCAGTTTAGA      180
AAAGGCTCTG TGCCAAGGAG GGACCACAGG AGCTGGGACC TGCCTGCCCC TGTCTTTTCC      240
CCTTGGTTTT GTGTTACAAG AGTTGTTGGA GACAGTTTCA GATGATTATT TAATTGTAA      300
ATATTGTACA AATTTTAATA GCTTAAATTG TATATACAGC CAAATAAAAA CTTGCATTAA      360
CTTAGGCCTC TTTGGCCGAA                                     380
```

(2) INFORMATION FOR SEQ ID NO:1249:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 386 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

```
GAATTCGGCC AAAGAGGCCT GTTTGGTTTG TGA CTAGACT TAAAAACT AAAATAAGCC      60
AAATAGATGC TAACAATACT AATTTCACAC CAAGATTGTA AAAAAAGTACT TCAAGTTTTA      120
TCTCTTATCC CTAGAGAAAG TAAATAAAAA GTGGCTCTTG CAAAAATAAA TGAAAACAAA      180
ACCACCAACA AAAACTAATC ATATAAGATA CTGTTTTTCT TTTGAATAC TTCAATTGGT      240
CCTATATTAG GATAAGGTTT TGATAGCAAG GACTTCCTAG CTTCTTCCTT TATCTTCCAT      300
TCTCTAGTCA CTTCCGTGTT TTTATCAAAC AAGGCTACGT GTAGGCTTTC CTACAAAGTC      360
AGATTGAATT CTACCACCTT CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1250:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 428 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

```
GAATTCGGCC AAAGAGGCCT AACCATGTCT GACCAGATCA TTGGGAGAAT TGATGATATG      60
AGTAGTCGCA TTGATGATCT GGAAAAGAAT ATCGCGGACC TCATGACACA GGCTGGGGTG      120
GAAGAACTGG AAAGTGAAAA CAAGATACCT GCCACGCAAA AGAGTTGAAG GTTGCTAATA      180
ATTTATACTG GAATCTGGCA TTTTCCAAG CCAAGAGAAG ATCGAATGGC TTTTGCAGC      240
TAACTACTAT GTGTAGACAG GTTTTATATT ATAAAGTATG CATTCTTATC ACCTAGTATA      300
TAGTTAGTTT GTAGAGTGAT TTCCCCCAG TTTCTGAAC ATGGTATCTT CACATCTTGG      360
ACCTTGGTCA GTTGTGCTAT TCATTATTA AACTAAAAC TTTGGCGGTT TAGGCCTCTT      420
TGGCCGAA
```

(2) INFORMATION FOR SEQ ID NO:1251:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

```
GAATTCGGCC AAAGAGGCCT AAGAAAAGTA GTATGAATGA GTTTTTCTAC ATATTA ACTA      60
CAATTTATGG TAATTTGTGA AATGTTTTTC CATTTTAAA TGTAAGAGTC TCTATCTCCA      120
CTCACAAGC AACAGGCACT GCTAGGGGTC TTAGGCTAAC ATCTGCCACC CCACCACTCT      180
GCATGGCCCA TAAACAGGTG CAGAGGACCA GAGTTCACCT GTCAGCAGCA CCGCAGAATC      240
CAACTCTAGG CCTCTTTGGC CGAA
```

(2) INFORMATION FOR SEQ ID NO:1252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

```

GAATTCGGCC AAAGAGGCCT ACTTTTTTTT TAATTTTCCA CTTTCTTCTT AACTTTACTT      60
CTCTTTTGTG CCCCCCCCAT CTTACAGAAG TTGAGGCCAA GGGAGAATGG TAGGCACAGA      120
AGAAACATGG CAAACTGCTC TGTGCTTTCA AACCAAAGTG TTCCCCCCTA CCCCAAATTT      180
GTCTAAGCAC TGGCCAGTCT GTTGTGGGCA TTGTTTTCTA CAACCAAATC TGGGTTTTTT      240
TCTTCTTTCT TTAACATAG AGGTACCACC ACAAGGGATG CCCTACTCTC TCGCAGCTCT      300
TGAAAGCATC TGTTTGAGGG AAAGGTCTCT GGGCAAGCAA GTGGTTATTT GGATTGCTTG      360
CTTCCCTTTT TCCACCTGGG ACATTGCAAT CATAAAATAA CAGTAAATTC CAAACCTCTA      420
GGCCTCTTTG GCCGAA                                     436

```

(2) INFORMATION FOR SEQ ID NO:1253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

```

GAATTCGGCC AAAGAGGCCT AGGGTAGATC ACTTGATATC AGGAGTCGAG GCGGGAAGAT      60
CACTTGACGT CAGGAGTTTG AACTGGCCCC GGCCAACATG GTGAAACCGC ATCTCCACTA      120
AAAATACAAA AATTAGCCTG GTGTGTTGGT GGGCACCTGT AATCCCAAGT ACTTGGGAGG      180
CTAAGGCAGG AGAATTTCTT GAACCCAGGA GGCAGAGGTT GCAGTGACCA GCAAGGTTGC      240
GCCATTGCAC CCCAGCCTGG GCGATAAGAG TGAAAACTCC ATCTCAAAAA AAAAAAAGAA      300
AAATTCCTTT GGGGAAGCCT TCTACATAAA AATCTTCAAC ATGAGACTGG AAAAAAGGGT      360
ATGGGATCAT CACCGGACCT TTGGCTTTTA CAGCTCGAG                                     399

```

(2) INFORMATION FOR SEQ ID NO:1254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

```

GAATTCGGCC AAAGAGGCCT ACCCGGTACT TACTTCTCAA TCCTAAAGAG AGAAAACAGG      60
TGTTTGATCA GTATGTAAAG ACCAGGGCAG AGGAAGAACG CAGGGAAAAG AAAAATAAAA      120
ATGCAAGCCA AGGAAGATT CAAAAAATG ATGGAAGAAG CAAAATTTAA TCCAAGAGCA      180
ACTTTTAGTG AATTTCAGC CAAGCATGCT AAAGATTCAA GATTCAAAGC AATTGAAAAG      240
ATGAAAGACC GAGAAGCCTT GTTTAATGAG TTTGTGGCCG CTGCTAGGAA GAAAGAGAAA      300
GAAGATTCCA AGACCAGAGG TGAGAAGGTA AGATGGTTTT AGTTCCAGTG GTGTGATTGA      360
TGGGAGTGTG AATGGGAAAG GTCTATGCTG GTGTTATGTT TCTAACCTTA TTCATTGGCA      420
TAAATAATAG GACGTACACT CGAG                                     444

```

(2) INFORMATION FOR SEQ ID NO:1255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

```

GAATTCGGCC TTCATGGCCT AAGAAGGACT ACCCTGCACT GCTTTCCTTG GATGAGAATG      60
AACTCGAAGA GCAGTTTGTG AAAGGACACG GTCCAGGGGG CCAGGCAACC AACAAAACCA      120
GCAACTGCGT GGTGNTGAAG CACATCCCCT CAGGCATCGT TGTAAAGTGC CATCAGACAA      180
GATCAGTTGA TCAGAACAGA AAGCTAGCTC GGAAATCCT ACAAGAGAAA GTAGATGTTT      240
TCTACAATGG TGAAACAGT CCTGTTCACA AAGACAACT CGAG                          284

```

(2) INFORMATION FOR SEQ ID NO:1256:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 691 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

```

GAATTCGGCC TTCATGGCCT AGTGGGAGTT TGCTAATGTG AAACCTAATG ATGTCTGAAA      60
ATGGTCTCTGA TGGGTATTAA TAGCCATCTG GAAAAATTTT ACATCTTCAC AAATAATCCC      120
AATAATTAT ATTGTGAAGA TATTATCCTG ATAGTCCTTC TTTTCCTATA TTCTTGTCGG      180
CTGTAGGATG AGAGCAGTAT GAAGCAAACA GAAGACATTT TGAAATTAAT CACAAAATTC      240
CCATTGCTTT GAAGCCTGCT ATTATTATAC TAAGCCTTCT TATAGCTTTA AAAATCAAAC      300
AATGCCAAAC AGTATATCTA ACATTTTAA TTTCTTTGA GCCAAACCAA TTTGGTTTAA      360
ATTCTCTGTC CTCCTGAAG ACAAGCTGGG CTGGGGAGGA CGGTGTCTAG GAGGGATGAC      420
CCCACTCAGC TCCAGGCAGT GTTCTGCCGA GACCCCAAGA ACTCGGGGTG TCAGAGGGCA      480
AAGGAACTAC CTGCCTTTCA CGGCTGCTGA CTTCTCAGG CTGCAAGCAG CACAGAATGT      540
TATCCTTACG TCCTGAGCCG GTTTAAGTCT GTGGAAAAGG AAGCACGGGA GAAATCCACG      600
TAACCTTTGC TTTCTTTTAA AGGGAAGCGG TTCCGCCGTG AACTTGGAAC CCTCAGCTCC      660
GGGTGTTCTC GGCAGAAGGG CAGCTCTCGA G                                     691

```

(2) INFORMATION FOR SEQ ID NO:1257:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

```

GAATTCGGCC TTCATGGCCT AAGCTGATCC ACGATCAGAG TGCTCCCAGC TGCCCCAGCA      60
GCTCCCGTC CCCAGGGGAG GAGCCTGAGG GGAAGGGGA GACAGATCCG GAGAAGGTGC      120
ATCTCACCTG GACCAAGGAC AAGTCGGTGG CAGAGAAGAA TAAGGGCCCC AGTCTGTCT      180
CCTCTGAGGG CATCAAGGAC TTCTTCAGCA TGAAGCCGGA GTGGGAGAAC TTGAACCATG      240

```

CCAACGTGCG GCGCATGCAC ACGGCCGTGC GGCTGAACGA GGTATCGTG AAGAAATCCC 300
 GGGACGCCAA GCTTGTTTTG CTCAACATGC CTGGGCCTCC CCGCAACCGC AATGGTGATG 360
 AAAACTACAT GGAGTTTCTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

GAATTCTGAG GGACTAACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTTGG 60
 CATTGCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT 120
 TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA 180
 GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA 240
 AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCACATG GACGACGATG ATGACGATGA 300
 TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA 360
 ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG 418

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 189 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

AAAAATTAAA TAATGCTTGA CTTTTTTTTT TTTTTTCTC TTTTGTAGGC AGGTTCTTGC 60
 TCTGTACCCC AGGCTGGACT GCAACAGCAT GATCTTGGCT CACCTCCGCC TCCCAGGCTC 120
 TGGCAATCCT CCCACCTCAG CCTTCAGACT GGCAGAGACT ACAGGCTCAT ACCACCGCAC 180
 CCACTCGAG 189

(2) INFORMATION FOR SEQ ID NO:1260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

GCGATTGAAT TCTAGCCTTT CCTCCGTTCA AGTAAATTTA GAAATTCCT AAGTTTCTT 60
 TATAACAGGT AGCCTAAATC TATATCATAC TTTTAAATA AAAATCTAGG TGCAAAATTG 120
 TTCTTATGGT TAAGGTTAAC ATGTACACTT CACAAACATT GAGACTTTG TTTTGTTC 180
 TGGGACAAGG TCTTGTCTG TCTCCAGCT GGAGTGGATA CAAGCATGGC TTGCTTCAGC 240
 CTCAACCTCC CGGACTCAAG CGATCCCCC CCCTCGAG 278

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

```

GAATTCGGCC TTCATGGCCT ACTCACTGGA TGCTGGGGGA GGGCCCCTCA GGTGAGCAGC      60
CCACCACTGA CTTCAGCGTT GCTGGCTCGG TTATCAGACT CTCATCCAAC ACAAGCTCAC      120
AGGGAAAGCC GTTCCTTGCT CCTTGTGGAG GGAGCTACCG TCATTGCCCT GAGACCACCA      180
GCCAAGAAAG TAGGTATGTC CAGGTAGGGA ATTCAGAGGG ACCCAGTGCA TCCAATTATA      240
CAATTATACC CAGAAAGTCC TCGAG                                         265

```

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

```

GGTCAGTATT GAAGGTTGTT TTCTGAGCCA TTGTATGAAG CTGCTGTTTT GCGTCCCTA      60
ATGCAGGGTG AGATGGTAGT GTGATTCTTG TTGTGACATC TCGTGACTGG GCAGGACGCT      120
GAATACTGAT TGCTGCAGAT GGAGGATGCT GGATAGACAA GGTTGGCCTA CTAAGTGCTG      180
AATCAGTAGC ATGCGCCGCT GTCGTAGTGA TGA CTGGAGA CTGAGCTCTG GTGGCTGAGA      240
CAGTTGCTAC CACAGCAGGA GGGATGGCAT TGGAGGTGGT CACAGGTGGC CGAGACTGGA      300
TTGGTTGGTG AATGATGTGC TGTACTGCTG GCTGAGCAGT AGCAGCATTT GGCAGCTGTG      360
AGGTCGGCCT CAGGACTGTG GTTACTTTAG AACTGGACAT CACAGCAGCA GCAGCTGCAC      420
CTCGAG                                         426

```

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

```

GAATTCGGCC TTCATGGCCT AGGCCGGTGT TTATGCACGA TGGCGTTGAA AGCTAGTCCA      60
TCTCTCCAGC TGGTGGTGAA GTTGTGTACA TTGACGTTGG GATAACCTGC AGTCTTCATC      120
TGGCACCACA GAAGCAGGSC ATCCTTGGCT GACTTCTTCT CCTTGTGTGTC TTCTGTCTCC      180
ACACTGATGT CTTGGATCTG GAATCGAAGG ATGATGGTCC AGACCAGCCC AAGGGTCAGT      240
CGGTGGTTTC CGTCCACAAT GTCATGGGAG CCCATGTTTT CCAAGTGAC TTTCTGTCTC      300
TTGAGGAACT GCAGTGCCTT GTCCACGTTT TCCAGGCAGT GGATCCGCAT GCGGCCCTTT      360
GTAGGCTTTG GCAGTATCTC TCCCAGAGAG ACCTCGAG                                         398

```

(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

```

GAATTCGGCC TTCATGGCCT AAAAAAGCT GTTAAGAAAA TATGTTTAA AAATTGCCC      60
AACAGGAAGG AGAAAATTAG AATCTAATAG CAAACTTGTG TCAAAGCAGG GGAGACCACA      120
TGATCTTCCT CTTTGAAAAT CTGTCCTGGG TGATGACCAT ATGCTCTCTA AACAGGTTT      180
CTGTGTTTGA GGGAAAGAAG CTCAGAAAGG ACCCCTGCTC TTTGATGACC TCCCTCCGGC      240
CAGCAGTAAC CTCGAG                                     256

```

(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

```

GAATTCGGCC TTCATGGCCT ACAGAGTCTA ATTAGCCATA TTTATATGAT AATAATAAAC      60
ATTTTGGCTA CAGTCCTACC TAGATTTTTT TTTTITAGAT GGAGTCTTGC TCTGTCGCCC      120
AGGCTAGAGT GCAGTGGTGC GATCTTGGCT CACTGCAACT TCTGCCTCCC AGGTTCAAGC      180
AACTCTGTTG CCTCAGCCTC CCAAGTAGCT GGGATTACAA GCGCACATGA CCAGCCTGG      240
CAGCTCGAG                                     249

```

(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

```

GAATTCGGCC TTCATGGCCT AGGTTATATA GCAGTGATGC TTTCATAGTA TTTTCTTGA      60
ATAAGGTCCC CAAAACCTTA TTAAGTTCCT GGTAGGCATG GAGCATTGAA GATGGCAGAC      120
ATGGTGCAGT CTCTCAAGGA GTTTACGCTC TAGTGGAGAA AACAATCAGA CAGCCTTAAA      180
ATACATGTAT GGCTACTATA ATAAATACTG TGAAGCAGGA GTGCACCACG AAACCTGGAG      240
TCCTCTCCAT CCTCCCTTC TCGAG                                     265

```

(2) INFORMATION FOR SEQ ID NO:1267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

GAATTCGGCC TTCATGGCCT ACTAGACCTG CCTCGAGATT AGGGGGGTTA GACTCAGAAT	60
TCTGTCCAAA CTCCTGGACG ACCTCTTGAA ATTAAGTCAG GGATTTTATG TACTGGGTTA	120
ATTTGTAAC CTCCTGGTAT AATATTAGGT TTGCATGTAG AAAGGGTCTC CAGTATAGGA	180
CTTCAAAGAA ACTAAGCCAT AGACGTAATT TAAGGGCTGT TCTGATCTGA AGAAGTGCCA	240
TGGGTAGAAG TTTAGCCAT GGTAAAGAGG CTTCTGGCA TCATTTGCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

GAATTCGGCC TCATGGCCTA CTGGTCCAAG CTGATTACCC TCATAGTGTC CATCATTGAG	60
GAAGACAAGA ATTCTACAC TCCCTGCCTC AACCAGTTTC CCCAGGAGCT GAATGTGGGT	120
AAAATCAGCG CTGAAGTGAT GTGGAATCTG TTTGCCCAAG ACATGAAGTA CGCCATGGAG	180
GAGCACGACA AGCATCGTCT ATGCAAGAGT GCCGACTACA TGAACCTCCA CTTCAAGGTG	240
AAATGGCTCT ACAATGAGTA TGTGACGGAA CTTCCCGCCT TCAAGGACCG CGTGCCTGAG	300
TACCCTGCAT GGTTTGAACC CTTGTCATC CAGTGGCTGG ATGAGAATGA GGAGGTGTCC	360
CGGGATTTC TGCACGGTGC CTTGGAGCGA GACAAGAAGG ATGGGTTCCA GCAGACCTCA	420
GAGCATGCC TATTCTCCTG CTCCTGGTG GATGCTTCT CCAACTCAA CCAGAGCTTT	480
GAAATCATCA AGAACTCGA G	501

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 330 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

GAATTCGGCC TTCATGGCCT AGGCCCTGC TCCACCTGGG GGGACTGGGA GTGTGAGTGT	60
GCAATGGCATG TGTGTGGCAC AGATGGCTGG GACGGGTGAC AGTGTAGTG CATGTGTGCA	120
TGCATGTGTG TATGTGTGTG TGTGTGTGGC ATGCGCTGAC AAATGTGTCC TTGATCCACA	180
CTGCTCCTGG CAGAGTGAGT AACCCAAAGG CCCCTCGGC CTCCTGTAG CTGTTTCTT	240
TCCTTTTGT GTTGGTTTTA AAATACATTC ACACACAAAT ACAAATTGAC AGTCAAAAT	300
CCATGAAATG AGATCCCCCA GCGCTCGAG	330

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 502 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

GAATTCGGCC	TTCATGGCCT	AAAAAAAAAA	TACTGATTCA	CTTTTGCAAT	TTTTCAGATA	60
CTACTTGATG	TGACACCTCC	CCTAGGCTTG	CTGTGGGTCT	CTTGGAAGAT	AGAGCTATAT	120
TAACTCCTTG	ACTTAAAGGG	CAGCAGACTA	TATAAGGTCT	CTTTACAGAC	AGAGTAGGGA	180
GAATAATGAA	AAACTTTTGG	ATTTCTAGAG	AGAAGAGAGA	AGACATAGCA	ATGGAAGCTGT	240
TCTTAGCTTT	GTTTGCTACA	ACTCTTCAAA	GTTTAATTTT	AGATTCAGTG	CATTTATTCA	300
TAGAGCATGA	AACATATAAT	CATGCCTTT	ACTAATTGCG	GATACTTAAA	ATTATATATT	360
TTTGACCTAC	TGTGTTATGG	TCAATTGAA	AAAGAATGGT	TTGATTATAT	ATTATTGTCT	420
GTAGATTCCC	TGTACTATT	TAGGATCATA	TGACATATTA	TCATTACTAA	ATATAGCACT	480
AATTATTGAT	GCTCCGCTCG	AG				502

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

GAATTCGGCC	TTCATGGCCT	ACCCCTGACT	ATTCAGTAGG	AGAAGAAATC	AAAAATCCAT	60
TCTTTTCTCC	TTCTCTCCCT	CCAACAGTGG	CCAGGGGAAG	GGGAAGTGAG	GGCAGGGGCA	120
AAAAGATTGG	GGAATTTTAA	TTTATTTATT	TATTGTGACT	TTTCATTTT	TTGGTATTTG	180
GCTTTACTGG	AATAGGAGGG	CCCCTGCCCA	CTGTGCCCGG	TTTATCCCTT	ATTCGCCAAA	240
CCCTGCTCTC	CCCAACACCT	ACTCACTTAA	GCACCTGTCC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1272:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

GAATTCTAGA	CCTGCCTCCA	ATTGAAGAT	TTATTTCTCT	CTTTGGATAT	AGAACAAAAT	60
AACTTTATGT	ACATTTTATT	TCACTTTATT	TTACTATTGG	GTGGTGCAAA	AACAAATTGC	120
AGTTTTCCCA	TGAAAAGTAA	TGGCAAAAAC	TGCAATTACT	TTGCAACCAG	CCCAATATTT	180
TATTTTGAGA	CAGAGTCGCA	CTCTGTCACC	AAGGCTGGAG	TGCAGTGGTG	TCATCCCAAC	240
TCACTACAGC	CTCTGCCTCC	TGGGTTGGAG	AGATTCTTGT	GCGTCAGCTT	CATGTGTAAC	300
TGGAATTACA	GGTGACGCGC	ACCACGCCCA	GCTAATTTTT	GTATTTTITG	TAGAGATGGG	360
GTTTCGCCAT	GTGCCCCTGG	CTGTTCTCAA	ACTCCTGACC	TCGAG		405

(2) INFORMATION FOR SEQ ID NO:1273:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 412 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

CGGATTGAAT TCTAGACCTG GCTCGAGGCA GGTCTAGAAT TCAATCGGCT TCCTGGCAGT	60
GCCCTCTCCC AGATGAGACC TGATCTCTTT TTTGTTTTTT GTTTTTTGTT TTGAGACAGA	120
GTTTTGCTCT TCTTGCCAG GCTGCAGTGA GTTGAGATCG CACCACTGCA CTCCAGCCTG	180
GGTGACAGAG TGAGACCCCA TCTCAAAAAA AAAAAAAAAA ATCTGGCCTT ATGGACTGTG	240
TACTACACTC TAGTGGGGT AAGAGGCAAT GGGTAAATAG GTAAGTAGAT TATTGGATGT	300
ATTAGAAGGG GCATGGGGAA TGTGGGTCA AGGTTATAGT TTAAATAGG GTGTCAGGG	360
AAAGCTTTCT GAGAAGGTGA CATTTGAAAC AAATACTGA AGGAGTCTCG AG	412

(2) INFORMATION FOR SEQ ID NO:1274:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 285 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

GAATTCGGCC TTCATGGCCT AGCTATTTTT AAACAATATC TGAGATTATT CATTCAACTA	60
AAACTTATTA AGCATTTAAT ATCTGTCTGG CATTCTTCAG GCACCAAGGA TATTCGTTG	120
AACAAAACAA AATCTTTGTC ACTATGGAGT TTACGTTTTG TGGTGGCATT GGAGTGAAGA	180
GCTAGGGAAT AAAAAACAA GTCAATATGT AGTATGCCAC TTGGTGGTAA GTCATTGGA	240
GAATGATGTA GTAGGGAAG AGGAAAAGGG TGTAGGCATC TCGAG	285

(2) INFORMATION FOR SEQ ID NO:1275:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 280 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

GAATTCGGCC TTCATGGCCT ACTCCACACA TTCATCTCCC AAAGGACTCC TTGAATATTT	60
GCCCCAAAAC ATCAGCTCCC AGAAAACACC CCTCCCAGTC ACACACACAC CCAAATTCTC	120
CGATGTATTT TCATTTTTTT TCTCCTCTC TCTTCTCTT TTCCTTCCTT CCTTCTCTCT	180
TTTCTCTCTT TCCATCCCTC CCTCCTTCC TCCTCCCTT CCTCCTCCC TCCCTTCTCT	240
CCTCCCTCCC TCCTTTCTT CCTCCCCCA CCCACTCGAG	280

(2) INFORMATION FOR SEQ ID NO:1276:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 220 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

```
GAATTCGGCC TTCATGGCCT ACGAGTGGTG CGATTTTTTT TTCTTAGCTT ATCAGCTATG      60
GTTAGTGTTA GCGTATTTTA TGTGCGGCC AAGACAATTC TTCCTCTTCC AGTGTGGCCC      120
AGGAAAGCCA AAAGATTGGA CACCCCTGGT AGAGGCAGAA ACTCACTGGG TTAGTTCCAC      180
AGCATCTGAT CAAAGATATG AGGCCAAAGA GCCTCTCGAG      220
```

(2) INFORMATION FOR SEQ ID NO:1277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

```
GAATTCGGCC TTCATGGCCT ACGAGCTGAG ATTGCGCCAC TGCACTCCAG CCTAGGCAAT      60
AGAGTAAGAC TCCATTTCAA AAAAAAAAAA AAATGTTGAT CAAAAGAAGC CAGATGACAG      120
AGTACTCACT GTGTGAGTCC ATTTATTGTA AATTCTAGAA CAAAAAATAA ATATCCATTG      180
ATAGAAATGG GAACAGTGTT GGCCTATGAA GAATGGAAAT TGA CTGGAAG GAGGCCTCTG      240
CTCGAG      246
```

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

```
GAATTCGGCC TTCATGGCCT AGCTGGGCGT GATGGCGGGC GCCTGTAGTC CCAGCCACTC      60
GGGAGGCTGA GGCAGGAGAA TGGCGTGAAC CCGGGAGGCG GAGCTTGCAG TGAGCCAAGA      120
TTGCGCCACT GCACTCCCGC CTGGGCCACA GAGAGAGACT CCATCTCNAA AAAAAAAAAA      180
GAAAGAAAAA AAGAAAATAA ACAAAGAAAA AATTAAGATT TTTGAAAATA AAACAAATAT      240
TAAAAATTAT TGAAATATAT TGAAAGTTT TTCACCATAT ATATTACCT TTTAAAAGGA      300
TATGAATTCA ATTATTTTAT TTGCTTATGG AAAATAGATC CACTGCTCTA AGATGCTACT      360
AATCATGCTC AGAGGATTCA CAACAAACAG ACTGATAAGG TATTACTTAA AGCGCTCTAC      420
ATTAAATAGA GCATTCCAGT TTTCTAGGGC ACACTACTTG CTGTATTTC AAGGTCAAGC      480
AAAATAGCTT TCGTTCGAG      499
```

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

GAATTCGGCC	TTCATGGCCT	AATGAGCTAA	AAGCAGTGTC	ATCTCCGCAT	GTTGGAGCAG	60
CCAAGAAATA	GTTTGGTACT	ACCGACATTG	TCTAATCCAT	GTACATCCT	CATACAATTT	120
AATTGCTCAA	CCATGCATTT	AAAACCTCCTC	AAGAAAAGGAT	TGGTACTGCA	ACTGTAGGTA	180
AAC TGAAAAA	AAATAAGAAA	GAAAGAGTTG	GATGAAAATG	TGAAAGCCCA	AGTTTAGATG	240
TGCATTAAGT	ATTAAATAGC	ACAGTATCTT	CTTCATGGAG	CCTTTTFTCC	TCCCCCATCC	300
CCTGCAGCTA	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

GAATTCGGCC	TTCATGGCCT	ACTTCCTTTC	ATTTTGAAGC	AACAGTTTAT	AAACAGGAAA	60
GTCTACTGGT	TTCATAGAAT	CTGTCAGATT	TGCTTATTTG	CTACTGGTTT	CACGCGCGTG	120
GACTATATTC	CAGTGTITCT	AGTCAAAGAC	CTTTATCCTC	AAATCATGAG	ATTAGAGTAA	180
AACAAC TGCT	GTAAGGTTGA	GCATTTCATG	ACCAATGACT	ATGAAGGCAC	ATTCACCAAAA	240
CACAGGCACT	TTAAGGGCAT	CCTTGATTAA	TTTGCTAATT	GCTATTTTTT	GTTGGTATGT	300
GAATTCCTGC	TAGGAGGCCG	AGGCTAGTAG	GCAATGAAAA	AGACAGAACA	ATGGTAAAAAT	360
GCAGCCCCCG	TCCTCTACAA	ATTGACAGTA	TAATTTAGGG	GCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:1281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

GAATTCGGCC	TTCATGGCCT	AAGATTGACA	AAGAAATAGA	GCTTCACAGA	ATTCTTCATC	60
ATAAGCATGT	AGTGCAGTTT	TACCACTACT	TCGAGGACAA	AGAAAACATT	TACATTCTCT	120
TGGAATACTG	CAGTAGAAGG	TCAATGGCTC	ATATTTTGAA	AGCAAGAAAG	GTGTTGACAG	180
AGCCAGAAGT	TCGATACTAC	CTCAGGCAGA	TTGTGTCTGG	ACTGAAATAC	CTTCATGAAC	240
AAGAAATCTT	GCACAGAGAT	CTCAACTAG	GGAACCTCGA	G		281

(2) INFORMATION FOR SEQ ID NO:1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

```

GAATTCGGCC TTCATGGCCT AGTAGTTTAT TATATAGAAA TTATTTGTCC TTGTCTTAGT      60
TGTGCCCTTT GACTCAGCAA TTCCCCTTCT ATAAAAATTT CCCAAGCAGA TGATTATGGA      120
TATATGCACC AATTGGGAAA CAGGGATGTT TATTGTTTAT AGTAGCACTC AACTGAAAAC      180
AACATAGTTG TCTTCAGGAG CGGGGACTGA TTAATTTATG ACATGAAGCA GAATAATGCA      240
AAATCTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:1283:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

```

GAATTCGGCC TTCATGGCCT AGCTGAAGAA GGCCTTCACA GAGCTTCAAG CCAAAGTTAT      60
TGACACTCAA CAGAAGGTGA AGCTCGCAGA CATACAGATT GAACAGCTAA ACAGAACGAA      120
AAAGCATGCA CATCTTACAG ATACAGAGAT CATGACTTTG GTAGATGAGA CTAACATGTA      180
TGAAGGTGTA GGAAGAATGT TTATCTTCA GTCCAAGGAA GCAATTCACA GTCAGCTGTT      240
AGAGAAGCAG TCTCGAG                                     257

```

(2) INFORMATION FOR SEQ ID NO:1284:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 434 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

```

GAATTCGGCC TTCATGGCCT AAAGACTAGC ATATTTATCT TTGACTTGAT TAATCAGACC      60
TAATTTGCAT TCGCAAATGA GACTGATAAA AATGGATTTA CCTTTTAACC TTTAGAGGAG      120
GAAAGGTATT TCTCTGCAAG ATTTCTGGGG CTATCGTTTC TTAACCGATA AGAAGCCACT      180
CCTTTATCAA TAAAGATGAA AATCCGCAAT TTGCATTAGT GAATGGGACT GATTATTATA      240
TAGTTAATTA GCATCTGGAA ATGAGGATTA TCTTAATTAC AAAGCACAAT TTCCCTAATA      300
GCTACAAAAC TGTAAGTTTG ATCCATGTGG AAATGGTAA CATTATTATG TAATTAGTGA      360
TAACATTAAT AGTGTAGAAT ATTAGATGT AATTGCATA TGCAAATGTG ATTTACCTGA      420
GCCAAAAACT CGAG                                     434

```

(2) INFORMATION FOR SEQ ID NO:1285:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 302 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

```

AGCAATATTT ATTTAGACA GACTTCTGCG TTATGACCCG GCTGCTGGGC TACGTGGACC      60
CCCTGGATCC CAGCTTTGTG GCTGCCGTCA TCACCATCAC CTTCAATCCG CTCTACTGGA      120

```

```

ATGTGGTTGC ACGATGGGAA CACAAGACCC GCAAGCTGAG CAGGGCCTTC GGATCCCCCT    180
ACCTGGCCTG CTACTCTCTA AGCATCACCA TCCTGCTCCT GAACTTCCTG CGCTCGCACT    240
GCTTCACGCA GGCCATGCTG AGCCAGCCCA GGATGGAGAG CCTGGACACC CCCGCACCTCG    300
AG                                                                    302

```

(2) INFORMATION FOR SEQ ID NO:1286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

```

GAATTCGGCC TTCATGGCCT AATCTTTTCT AATTTGTCTT AATGCTTTAT AATTTTCTAT    60
GCAGAGGTCT TGTAGATCTC TTTCCAAGAT ATTTGATGTT TGTGTTTGTG TTTGTTTGTG    120
TGTTTTTTGA GACGGAGTCT CACTCTGTTG CCCAGGCTGG AGTGCACTGG CGTGATCTTG    180
GCTCACTGCA ACCTCCGCCT CCTGGGTTCA AGCAATTCTC CTGCCTCAGC CTCCAAGTC     240
TCGAG                                                                    245

```

(2) INFORMATION FOR SEQ ID NO:1287:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

```

GAATTCGGCC TTCATGGCCT AATTTTTTTT CTCCTCTTTC TTCTAGTACA TATTGATAGG    60
TATAACATAA TTAAGGTTTA AAAAAAATTA GACATAGTTA TTCAGATTTA GGACCAAGTAA    120
GGATAGAACT TTCTCTTATT TATGAAAAAA AATGCTAATA ATTTGGGGC AGTTTTTTTC    180
TTTAATTATT TTTTCAATT TCAAGTTTAA TTTTATTTTA GCTGATCTCG AG              232

```

(2) INFORMATION FOR SEQ ID NO:1288:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGCCT TCATGGCCTA AGAAGATCAC    60
TTGAATCTGA GAGGTAGAGG CTGCAGTGAG CGAAGATCAC ACCACTGGAC TCCAGCCTGG    120
GCAACAGAGT GAGACCTGTG CTCAAAAACA AAGAAGAGCA CTAGCTTCTC TATCAAGTAA    180
GTGTAGGGTT TTAATAAACA CAAATGGACT TTGGTAGACC AAAACAAAAG CCCACGAGTA    240
TGGAAGTTTC CCTGAAGTT GGAAATTCAA TTTCCCCTTT ACCCCCCCAA CCCTCGAG     298

```

(2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 227 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCCA TACCCATGGT CAGCCTCTTC CTCGTGTTC      60
CGGCCTTCGT CATCAGCAAC ATCGGCCACA TCCGCCCGCA GAGGACCATT CTGGCTTTTG      120
TCTCTGGCAT CTTCTTCATA CTATCGGGCC TCTCCTTGGT GGTGGGCTTG GTTCTTTACA      180
TCTCCAGCAT CAACGACGAG GTCATGAACA GGCCCAAACA GCTCGAG                      227
  
```

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

```

GAATTCGGCC TTCATGGCCT AGACAACTCT TAGCTAAATG TGGTTTGTT TTGAGCTGGA      60
AGAGAGTACA AGGTGCTTCC GGAAAGCTTC AAGCCTTCGG ATTCTGTGAG TACAAGGAGC      120
CAGAATCTAC CCTCCGTGCA CTCAGATTAT TACATGACCT GCAAATTGGA GAGAAAAAGC      180
TACTCGTTAA AGTTGATGCA AAGACAAAGG CACAGCTGGA TGAATGGAAA GCAAAGAAGA      240
AAGCTTCTAA TGGGAATACT CGAG                      264
  
```

(2) INFORMATION FOR SEQ ID NO:1291:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 323 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

```

GAATTCGGCC TTCATGGCCT AGGTGCTCTC AAGGATCAGT ACTGGGTAAC AATAATCAAA      60
CTTTGAATTT AAACATGCAT CTATTATTTG TGTGTTTTGT TTTGTTTTT GAGGCAAAGT      120
CTCACTCTGT CACCCAGGCT GGAGTGAAGC AGCCCAATCT TGGCTTACTG CAACCTCCAC      180
CCCCTGGGTT CAAGCAATTC TCCTGCCTCA GTCTACCTAG TGGCTGGGAT TACAGGCGCC      240
CGCCACCACG CCCAGGTAAT TTTGTGTTT TAGTAGAGAT GGGGTTTCAC CATGTTGGCC      300
AGGCTGGTCT AGAATTCAAT CGG                      323
  
```

(2) INFORMATION FOR SEQ ID NO:1292:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 289 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

GCTCGAGAAA	CTTCTGCTGC	ACGTGCGTCT	TCCCCTCCAC	CTTCACCCCT	TGTGGCTCAC	60
TCACGCACCC	ACTCTCCAGT	CCACCCCTCC	TCAGAGACCC	TGTCCACTCA	TCCATCTCTC	120
TCCCATTGCG	CTTCCTCTTC	ACTCCGTTCC	TTCTGCCTCC	CACCATATGC	AAATCTTCTC	180
CATCCTTAAA	AGCCTGATTG	CCTCCTCTGG	ATTTTCCAC	ACTCTGGGG	AACCTCTCTG	240
GACTCCCTGC	CCTTACCAC	CAGCCTTCC	CAAAGAGAAA	TCCCTCTCA		289

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

GAATTCGGCC	TTCATGGCCT	AGTTGAAATC	TTAGGAATG	AACCTCTGAG	GGCCAAAAAA	60
TGTGACTGAC	GGGAACAATT	CTTAACTGA	TTAACTAGCT	GTAATATAGT	TTTGTGAATT	120
TATTGCACTG	ATGTTGTACC	TTGTGGTATA	TCTGTCCCTA	TTAAATAAGT	GTTGTTTTCT	180
CCTCTTTAAT	ATTGCTGTGA	ACAGTGGTGC	CCATTGTAGC	ATATGTTTGA	TTTTTTTTTA	240
TTATTTTATA	AGAAAACTAC	GTTAATTTTA	CCTTACTTTC	ATTGTAATA	AGCCTGTCTT	300
CCTATCTGGA	TTTTTTGTGT	GCATACATAT	TCTACTGATT	AACACTTTT	GCAGTTTTAA	360
TCCTGTATTA	TTTCTTCTAC	TTTGTTTTGT	GTAAGGGG	AAAAATAAA	AAAAGCTCGA	420
G						421

(2) INFORMATION FOR SEQ ID NO:1294:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

GAATTCGGCC	TTCATGGCCT	ACAGGTGTAT	GTCACCATGC	CTGGCTAATT	TTGTTTTTCT	60
TTTCTTTTTT	TTTTTTTCT	AGAGACAGGG	TCTCACTATG	TTGTCTGTCC	TGGCTGGTCT	120
CAAACCTCTG	GGCTCCATCT	TCCCGCTTCG	GCTTCCTGAA	GTGCTGGGAT	TACAATAGGC	180
ATGAGCCACT	ATGCCCATCC	TAAAGTTTTA	CAGCCCAATA	ATAGTAATAT	TCCATCACTA	240
CAGCTATCAT	TGAGTTTCAG	AAGTTAGACT	GTTAAAAGTT	TCAGTAAAGA	GCTTTAACCA	300
GTTTATTGTG	GCAATACTGT	GTACACAATT	ATTTTGTGTA	AAAGGAAGGA	GATTTCTGTC	360
TTAAATAGCT	TTAATAAAGT	TTCAAGTTCA	TATACAGGAA	ACCTCGAG		408

(2) INFORMATION FOR SEQ ID NO:1295:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

```
GAATTCGGCC TTCATGGCCT ACAGGCACTC CAGTTATAAT TATGTGCCTT TCTTCCATT 60
CTACCACTTT CTCTGATACT TCTCACTTCT TTCTCTGGTA CTTCTCACTT CTTTCTCTGG 120
TATCATTTTC ATTCTTCATC ATGTGTTTAG TGCCTTTACT TCAATTCCTT CATTATTGTA 180
ATTTTCTTT TTATCATCTT GTGATTCAGT TTTTATTAT TTTTGTATAG TATTCTCCTT 240
TTCTTCCATT CCACTCGAG 259
```

(2) INFORMATION FOR SEQ ID NO:1296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

```
GAATTCGGCC TTCATGGCCT AGTGGAGAGT GCTATCATT A CACCTGAAC TCTGGGCCAG 60
CTTAAGTGTA TATTCTGTAA AAAATTTGAA ATCCCCCAA TGTCACATGC TATGACAGTC 120
ACTTTCTTTA GTACTTTGTA ATCATACAAA ATGGTGTATG GGCTAAATAT TGCAGCACCT 180
ATGTCGTCAT CCTCCATGTT GCTTATTGAT CATGGAATGT TAATTTAGCA ATAATTTTCT 240
CTGTGTGTGC GCTCGAG 257
```

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

```
GAATTCGGCC TTCATGCAAG TAGGGTATGT AGGCTTCAGT TGGTTCTACT TTCAGAGAGT 60
TAAGATGGAA TGAGGCAGCT CATGGCACTA CAGGTCAGTT GCCTTCTCTC CAAAATGTTT 120
ACTCATGCAT GTGGGCACTC ATTGTATTTG AATAACAGCA ACAGTGCCTC CCTCAGTTTG 180
GAACCTCTAG TCCACTTGCT CACTCATGGT CCCTGCCTTA ACCCCAGTCA AGTTCAAAGC 240
CATAGGCATC ATTTGTCCGA CTGACATATT AGGGCATCTA CCAGTCAAAG GGTGATTGTT 300
GTAGATGACC TTTGGCCCGT TCTCGAG 327
```

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:


```

GAATTCGGCC TTCATGGCCT ACACTCTCAT GTTTGTTGCA GCATTATTCA CAATAGCCAA      60
GGTATGGAGT CAACCTGAAT GTCGAACACA TGAATGGATA AAGAAAATGT TCACACACAC      120
AATGAAATGT GATTAGCCT TTAAAAAGAA GGAAATCCTG CCATTGGAA CAACATGGAT      180
GAACCTGGAG GGCATTGTGC TAAGTGAAAT AAACCAGACA CAGAAAGACA AACACTGCAT      240
GACCTCACTT ACTGTGGAAC CCCTCGAATT CTGGATCTCC CTCGAG                      286

```

(2) INFORMATION FOR SEQ ID NO:1299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

```

GAATTCGGCC TTCATGGCCT AATGAATTGA GTATTATTC TATCATTCA ATTGCAAATT      60
GTCAGTATCC CCTGCTACGT TTCTACTAAT TTACCATCGC TTCTTCAAAA AATTGTGTTT      120
AGAGTGCTAC AATTCAGAC TTTGAAATGA ATCACTATAA CTTTAAAAA TTAGAGATT      180
TAAAACTGG AGATTGAATA TATATAAAAA ATACAAAATT TGACATTAA AACCTCATTG      240
AACTTTTAAA AAAGCCAGAC TCATATTAAG GCACACACC TCGAG                      285

```

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

```

GAATTCGGCC TTCATGGCCT AGGGCCAATG GCCAGGATCT CTGGGGACTA GAAGGGTGGA      60
TTCCTGAACC TGGGTAACAA CGAGACAAAC TCTAGCAATC TGAGCAAGGG AAGGGTCATC      120
AAAGTCCCAA AATCTAGCCC ACTAGCTGCC TAGCCAGGTA AACCAAGGCT TAGGGAGTTT      180
AGACCCCTTC ACATAAGAA GCTTAATAAA AAGTGTGGG TGAAGAGATA AACACATGAA      240
GGGGTTGGCT AAAGTCAAAA GAAGATCCGA GGCAGGTCTA GAATTCAATC GG          292

```

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

```

GAATTCGGCC TTCATGGCCT ACTCCTCATT TGCCACCACC AGGCCAGTTT GTCCCTTTCC      60
AAACACAGCA ATCAGGATCG CCTCTGCAAA GGATAGAAAA TGAAGTGGAA CTCTTAGGAG      120
AACATCTTCC AGTAGGAGGT TTTACTTACC CTCCATCAGC CCACCCCCCA ACATTACCTC      180
CATCAGCTCC CTTGCAGTTC TTAACACATG ATCCTTTGCA TCAGGAGGTG TCCTTTGGAG      240
TACCTTATCC TCCATTTATG CCTCGGAGGC TTACAGGATA GTAGATACCG ATCCCAGCAG      300

```

```

CCAATACCAC CTCCCCCTTA TCATCCCAGC TTAGTGCCAT ATGTGTTATC AATGCTTCCA      360
GTGCCACCTG CAGTGGGCCC AACTTTTCAGC TTTGAATTAG ATGTAGAAGA TGGAGAAGTA      420
GAAAATTACG AGGCCCTGTT AACCTGGCA GAGCGACTGG GAGAGGCAAA GCCTCGTGGA      480
CTGACTAAG CAGATATTGA ACAACTTCCT TCTTATCGGT TCAATCCTAA CAACCACCAA      540
TCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

```

GAATTCGGCC TTCATGGCCT AGTATCTATC TAGTGCCTGT TTGTGCGTTT TTTTCTTTCT      60
TCCGCTGCTT CCCCATTTTC CTTCGTCTCT TTTTCTCCTG CTCCTTGTTT TCCCAGCAGC      120
ACATGGGGTT CCTCGGAGGA GCAGAGGTGG CCGCCGTGGG GGGGCGTTTG GGCTGCGGTG      180
CTGCGTCATT TTTCTTTTGC TTTCTCTTTA CTTTAGACAC TGGCCCAACT CCAGGCGTTT      240
CCTTTCATTG CCTCAGTGCT TCTCTCTGA CCTGCATGTT GAGTTCTGTA TTGCTGGGGC      300
TTCCAACAAA AACCAGAGTC ACTGACAGAG GGAACAGCAG AGACCTTGTT GGTATTCAGC      360
TGATGATGAT ATAGCGATCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:1303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

```

GAATTCGGCC AAAGAGGCCT AGGGTACGTG AATCTATTTT TTCAGCTGGA AATTTTATGA      60
AATCTGGTGT GTATTTTATA CTTATAGCAT ATCTCGAGGC AGGTCTAAAT TCAATTCTAG      120
ACCTGCCTCA AGAGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

```

GAATTCGGCC AAAGAGGCCT AAATAAGTTT ACTTTTATTT TTGGTAACAC TTTACTGCAT      60
TGTCTGAATA TTGACAATCA GTATGCATTA TGAAGCTACC TGGCTAACAT TGTGTACTCA      120
CTGTGTGTGC CAGGCCCTGG GTTCAATGCT CTACATGCAC TTATATTTC TTTAATTCTC      180
TCTGCAACCT GAGATGGTAT AGCCACCTCA TTTTACAGAG TTGAAACTGA GGCTCAGAGA      240
CTGAAAGTTA AGCCTGAGGT TGCAGTCAAT AAGAGGCAGA GCTGGAACCT AAACCTACCT      300

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GTGTCTGACC ACCAGTTCGT GTTCTGACGG CAGGCTAGTC TGCATCACAG AGTGTGGAGT	360
AGATGGTGCA TGCCTGCTAG GATGGGCTAG GTATCACTGT AGGTAAGAAA CAGCCCCAAA	420
CTATGGAAAT GTACACCACC GAAGGCTCTT TTCCTGCCCA TGCTGCACAT CCTCCATGGC	480
TCTCCTGTGC CCTGTGCCCC ACATGCCCTC ATCCTGCCAC GAGAATAAAG GAGCAGCCTC	540
CATATGGGAG CTGTCAGCTG CTCTAAGAGA TGAAGGAGAG AGTGGCCCCG CTCAATGGCT	600
CCCAACTCTT CTGCCCTCGAG	620

(2) INFORMATION FOR SEQ ID NO:1305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 736 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

GAATTCGGCC AAAGAGGCCT ACTTTTGGCT CAATGTTTTT CAAACTTATT TGACCCCAAA	60
ACCTTTTTC TATACCCAAT AATAAGCTAC AGAACTAATA TTCTGCAAAT GTCTCTTGGA	120
ACACACTGCC TTAACAGAT ATTTCTATAG CTGTCAGTAT AGTTATGTTG CTCCAAGCC	180
TAGTTATCTC CAGTTGTTTT AAGGGTGTTA TGA AAAATTC TTA AAATATA TATGAATTTG	240
TGTAACACAC ACAGAGACAC ACACACATAC TACTTTAAGG GGGTGAGGAT CATTAAATCA	300
GATAATTTT AAGTTTCCTA GTGATTCTCA ATCTCTTTGA ATTTTACTTA CATTTACACA	360
CACACGCACA CACATATGTA TATACACATA TCATTTAAG AAGCTGAGGA TCACTAATTC	420
AGATAATGTA TAAGTTTCCC AGTGATTCTC AACCTCTTTG AATTTTACTT ATAATTACAT	480
ACACACACAC ACTGCTACTT ATATAAATGT TCTCATGTAA TCATGGTAAC AGCTCAAATT	540
CCCAAAGCAA GGAAGACTT CTCATTGTCA GTTAAACCTG TTA AAACATG AAAATATTCA	600
TTGAGCCTAG TTCCTTGTTA TAAATACAA GAAATAAGAC ATTCAGGCAT TTTCCCTTCA	660
TGAAGATGTT CAGTCATCCT TTCCTTGAAC TACAATTAGG AAAAGTATAT GTCTTTATTC	720
CATTGAAGTT CTCGAG	736

(2) INFORMATION FOR SEQ ID NO:1306:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 511 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

GAATTCGGCC AAAGAGGCCT ACAGCAATAT GCATCTTGCA CGTCTGGTCG GCTCCTGCTC	60
CCTCCTTCTG CTA CTG GGGG CCCTGTCTGG ATGGGCGGCC AGCGATGACC CCATTGAGAA	120
GGTCATTGAA GGGATCAACC GAGGGCTGAG CAATGCAGAG AGAGAGGTGG GCAAGGCCCT	180
GGATGGCATC AACAGTGGA TCA CGCATGC CGGAAGGGAA GTGGAGAAGG TTTTCAACGG	240
ACTTAGCAAC ATGGGGAGCC ACACCGGCAA GGAGTTGGAC AAAGGCGTCC AGGGGCTCAA	300
CCACGGCATG GACAAGGTTG CCCATGAGAT CAACCATGGT ATTGGACAAG CAGGAAAGGA	360
AGCAGAGAAG CTTGGCCATG GGGTCAACAA CGCTGCTGGA CAGGTTGGGA AGGAGGCAGA	420
CAAAC TGATC CATCATGGG TCCATCACGG GGCCAACCAG GCGGGAAGTG AGGCAGGGAA	480
GTTTGGCCAG GGAGTCGACA ATGCACTCGA G	511

(2) INFORMATION FOR SEQ ID NO:1307:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

GAATTCGGCC AAAGAGGCCT AATTTTCCC CACACCACAC CACTGTCCTC TGTGCCTGTG	60
GAAACCACTC AAATGCCTCT CCCCAAGCCT TCTTTCAGTA ACAACCATCT CATCCGGTTG	120
ATTACTGTAG CTTTCGGCCT GTATAACCCC TCCTTATGTC ATGCCTGTAC CAGATGTTCC	180
ACTGCATCTG TATCCACCA GATTGCACAT ACTCTCGAG	219

(2) INFORMATION FOR SEQ ID NO:1308:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 344 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

GCACTGCGCC TGGCCCTTGT GGATACTTTC TAGGTGATTT GAGGAGGAAA GGCACAGCCA	60
TGTCTCCTAA AGTTAACAAG CACTAAGCTT TCCCAAGTAG TGAAATGTCA AGCCTCTGCT	120
TCTGTCACTT ATTTGTTTAT TCAGCAGAAA GTCAGTGAGA GCCTTCTGTA CACCAGGCAC	180
AGTGCTGGGC AGTGAAAGAG ACAGACATGT CCCTGGATCC AGGGAGGAGA TGACCAAGTG	240
ATGGCTGTCA GGCCAGACC TTGCTGTTTG TCTGCAGCCT CTTCCCTCAG GCAACTTGTT	300
CTCTATCAGG AGAAATGAAA TAATTATTAT CTGGAGCTCT CGAG	344

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 565 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

GAATTCGGCC TTCATGCCTA AAAAGGGTCA GAGGAAGGCA GTATCCTTGG GGTGTTGCTG	60
AAGTTGAAAA TGGTGAACAT TGTGATTTTA CAATCCTAAG AAATATGTTG ATAAGAACAC	120
ACATGCAGGA CTTGAAAGAT GTTACTAATA ATGTCCACTA TGAGAACTAC AGAAGCAGAA	180
AACTTGACAG TGTGACTTAT AATGGAGTTG ATAACAACAA GAATAAAGGG CAGCTGACTA	240
AGAGCCCTCG AGTTGCAGGG AGCCCAGATC ATGCCACTGC TCTCCAGCCT GGGTGACAGA	300
GCAAGACTCT GTGCCCCCCC CCCACCCCAA AAAAAAAGAA AACAAAAATT AAAATCTTTA	360
GTTACTGTAT TATTCAAAAA TGTCTACTTT CAAGAAAAAC TACAGCCATG CAAAGAAACA	420
GTAAAAATGTG ACCATACTCA GGAAAAAAG CAGACAATAG AAATGGCTTC TCAGTAGGGC	480
TATATGTTGG ATTTAGCAGG CAAAGACTTC AGAGGCCTTT TAATAAGTAT ATTCAAAGAA	540
TTACAGGAAA ATATGAAAC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 104 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

TGCACAGCTG TAGTACCCCA AGAAGAAAAT GTTACTTCTC TCATCTGGGC AAAACCCACA 60
GAAGACTTCC CAGCTTCTGC CACATAAAAG ACACAGAACT CGAG 104

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTTTGCG TTCTGTTTAG CATGCTATCC TGTGTGAAAG AAAGTAAAT CCAATATTAT 60
GGAGAGTATG TTAAAGCCAC CTCTGAAATG AAGACCACTC TCGAG 105

(2) INFORMATION FOR SEQ ID NO:1312:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 407 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

GAATTCGGCC TTCATGGCCT AAAGGGAAGG GAGGTGTGAG GAGGATGGAG TAAGAGTGAG 60
AGGTCCTAAG AACATGGAGG GAGGCTGTGT GTGATCGATG GAGAAATATG GTCCTGAGAG 120
ATTTCTTGTA GTCAAGAATG GCCAATACAT GTCTACCTTT AACTGGTATT GGAAGGAAGT 180
AGTTTCCTGC TCTGTGCTCT AAATACTCTC TATTACCCTC AAGATGTCAG CAAAATGTGA 240
TACATAGCAA TCTTGTTTGA GAGATGCTTT AGGAATTGCA GAAAAACCAT GCTATCAAGT 300
GGTAGGGAAG TGAGTGGCAA GAGGATGTCT GTCACAGAAA CTAGGGATAG AGGGGCTGGC 360
AATGGCAGAG ATGCAGGTGG AGTGGACTGA TTAAGGGGAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1313:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 292 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

GAATTCGGCC TTCATGGCCT AGGTCTTGCC ACATTGGCCA GGCTGGTCTC GAACTCCTGG 60

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GTTCAGTAG TCCTCCACCT CAGCCTCTCA AAGTACTGGG ATTACAAGCG TTGAGCCACC      120
CTCCCAGCCT TTGCCTTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT TTTT 180
ATAGACCCCT TAAGAGAAGG GATGCTATGG GCAGGAAGAG ATTGAAGGTA AAGGAAAAAG      240
GATTACGCAC CCAAGCAAAA CAATTGGCCT GTGATAGAAG GGCGATCTCG AG                292

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(2) INFORMATION FOR SEQ ID NO:1314:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

```

GAATTCGGCC TTCATGGCCT AGATCCAAGA AGCTCAACAG ACCTCAAGTA GGATAAACAC      60
AAACAGATCT TCACTAAGTC CTACTGCTGA AAGACAAAGA CGAGGAGAAC ATCTTGAAAG      120
CAGTGAGAGA AAAACAACTC ATTATGGAGA GAGCAATGAT AAAATTCTTA TCAGAACAGT      180
GGAGGCCAGA AGGAAATAGA GTGACATATT CAAAATGCTG AAGGAAAAAT TTGCAACTAC      240
AAGTTCTAGA TCCAGCAAAA TTATCCTTCA AGAATGAAGG TTAGTAAAG ACATTCCCAG      300
ACCTTCGAG                                     309

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(2) INFORMATION FOR SEQ ID NO:1315:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

```

GGCCCCAGCT CCTGAGTAGC TGGGATTACA GGCATGCACC ACCACACCCA GCTAATTTTG      60
TATTTT TAGT AGAGACAGGG TTTCACCATG TTGGTCGGGC TGGTCTCAAA CTCCTGACCT      120
CAGTGATCCA CCGCCTTAG CTCCCAGAG TGTAGAATT ACAGGCGTGA GCCACTGCAC      180
CCGGCTGGGA AACATTTTAA AACGGCGCA GGGTTGTCTT TGAAAGTCCC AGGTTTCCTC      240
ATTGGCCCTG CCATTGGCGG GTGGGTGATT TCAGGCAGGA CACGCAGTGT CTGGGGACCC      300
TGGCTTCTC ACTGGAAGAC GATTGTTATG GTCCAGAGGG TGGTAACTCA GGTGTTTCATG      360
TCTGATTCTG GATGTTCTCT GCAGCTGCTG GAGTCTCCTG ATTGGAGAGC AGCAAATGAC      420
TGTTCATGA CAGTTCTAGT TGTACCTCTA GCACCCCCAC TCGCTCGAG                     469

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(2) INFORMATION FOR SEQ ID NO:1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

```

GAATTCGGCC TTCATGGCCT AATCTATGTG TGTCAACTTT CATAGAACCC TACACCAAAA      60
AAGGTGAATT TTATTCGTG ATAAATTAAG AAGTAAACAA AAAGAGACAA AAATAGTAAC      120

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CAGGGAAGCT TTCAAAAAAT ATATGTTCTT GTTCAAGACC AGCATGGCCA ACATGGCGAA	180
ATCCCATCTC TAATAAAAAAT AGAAAAATTA GCCAGGCGTG GTGGTGGGCG CATGTAGTCC	240
CAGCTATCCA GCACCGCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

GAATTCGGCC TTCATGGCCT AAAGGAATGG TATTTTGCCA ACGCAGACAA AGAAAGGAGT	60
GGCCCGTATG GATTTCATGA GATGCAAGAA TTGTGGACCA AAGGAATGTT AAATGCAAAA	120
ACCAGATGCT GGGCTCAAGG CATGGATGGA TGGCGACCAC TTCAGTCCAT ACCCCAGCTC	180
CGAGTCATAT AAGGTAACCC AGACAACCAC CTACGAATTT AAAGCTCCTA TAAGTTGCCC	240
TTTCTGCATC CGAAGTGTGA TATTGAAAG TTAAAAACGT TATCTTACAT ACATAGATCT	300
TAAAAAGTAT CTTACACCAC AACCTACTCA CAGATGCAAA GGCAGTGGTC GTGGTCTTCC	360
ATTGCTTGGG GTCTTGGGGC CGGGTTGAG GCTGAATGTC AGGGTTTCCT TTGCCATAAC	420
CTCATTTCTG ACCACGTGCT GTCAGCCAGG CAGCCAATGT GGACTTGGAG GCTGGCATCT	480
GCTGGGCACT GCTCGAG	497

(2) INFORMATION FOR SEQ ID NO:1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

GAATTCGGCC TTCATGGCCT AATCTGGATG TCTGTCCAAG GCCTGACTGC TGAACCTCCTA	60
CTTTTCCTAC AAAACCCCTAC CCACATGGCC CTTCCTGCGG GAAGAGATCT TGAGCCTCCC	120
TGGCTATTAA GACTCTGCTG TGCAGCCTTC TTTTACTGGA CTCAGGGCTA TCTTCCCCAG	180
ACTAGGGCCT TCTTGAGGAC AATCGTGGTG GCCCAGTGGT TGACGCTGTC TCCCTGTCAT	240
GTAGTTGGTC TTCCTGGTTG CTTCTTGCCC CTGTGGCTCC CTTGGGAGAC TGAAACTCAG	300
AGGACAGCTT CTGGTCTGCT GTTACATGGC TCCACAGGG AGACTGGCCC CACCTGTGCC	360
CCACCCATCA CAGCTAGGGC CTGGGATGGG TCAGACACTG GAAGAGCCTC CCCCTAGGCC	420
ATGCATATGG ATCGTGCCCA CACGCCTCGA G	451

(2) INFORMATION FOR SEQ ID NO:1319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 477 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

```

GAATTCGGCC TTCATGGCCT ACACTACGGT ACTCCCAGCA TATCACCCCTT AATGTAACCTT      60
TAAATAACAT GGCCATTTT TAAAAAGGAC ACAGGAACTA CATAACATTT TTTTTCAGAT      120
TTTGGAAAAT TCTAAATATG TCTAGAAAAA CTTTCTCTTC TGTTCATTTC TCCTTCCTAT      180
TCTCCATGAC CCCCTCCCCG CGGACTGTAT CAGGTACAGC CTGTTGGAAA TCCAGCACCG      240
CACATTAGGC ACACCACTGG TAAGTTTACT TGTGAGTTA TCACCTTTTT TTTCTTTTA      300
ATCAGAGAGG CAGCTCTGTG TTGAAGATGC TAGGTAGTGA TGGAAAAGAC ATTAGGAAAA      360
TTTGTTACCG TGGTAACCGG GGATGGACAT CATGACCTTT TGTGATATGC ATGCTGTGGC      420
CTTGSTAGTC TCTCCCTA ATTAACATCC TGTGAGAAAC GTGAGAGATG ACTCGAG      477

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(2) INFORMATION FOR SEQ ID NO:1320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

```

GAATTCGGCC TTCATGGCCT AGACGGAGGC TGGAGATTCA CATGGGGCGA GGAGTTGCAG      60
ACCAGCCTGG GCAAAGCATG GTGAGGCCCC GTCTCTGCAG AAATGAGAAA ATGAGCTGGA      120
TGTAAGTGGCA CCGACATGTG GTCCAGCTG CTGGGAGGGC TGAGGTGGGA GGATTGCTTG      180
AGCCTAGGAG TTCAAGGCTG CGGTGAGTAG ATCGTGCCAC TCGGCTCCAT CCCTGGCAAC      240
AGAGCAAGAT CATTTCTCAA AAAGAAAAAA AAAGCCATCT CGAG      284

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(2) INFORMATION FOR SEQ ID NO:1321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

```

GAATTCGGCC TTCATGGCCT AGGGAAATGT GTGATTGGGA AAGAGGCAGC TTTTAAAAAT      60
GTGTCTGGCC TTTGACCACG CAATTTCACT TTCCAGTATT TATTCTAGGA AAATACTCAT      120
ACTATTGCAA AGTTTATATA TAAAGATAGT TATAACTGCA TTGTTTATCA TTTACAAAAA      180
GAAAACATCT GAAAGCCCAA CAAGACGGAA CTGGTTATTC CACATTGGCA CATTATACA      240
AGGCAATGCT CGAG      254

```

(2) INFORMATION FOR SEQ ID NO:1322:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

```

GAATTCGGCC TTCATGGCCT AGGCACAGAA AAATTGGAAA GGATTGGTGG TCGTACATCT      60
TGCAGCTCAC TTAGTAGCTG CATGCATGTA GACCGGGTGG TGTTGATGCA GTGTTGACTT      120

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GCTGGCATTG GGGTGGGTGG TAGCATGGTC AAGCTGGCTG AGTGATGGGA TATTGTCTCA	180
GAGGTTGGTG CAGGGAAACT CTGTGGGTGT GTCTAATGCA AGGATAATGA CAATGTCCTG	240
TCTGCCTGGT CTTTGGGGGG TCAGGTGGAG ATGTCCTTTT GGAAAGGCAG CCATTCTCTT	300
TGAGTGCCA GAGGGCATGG TGCAGGCACA TGGATTGAGT GGAGGACTCG AG	352

(2) INFORMATION FOR SEQ ID NO:1323:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 440 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

GAATTCGGCC TTCANGGCCT ACTGTGTGTA GAATTCTGTT TTCTCATGAT ATTGAAGACA	60
TTATTCCAGT ACTTTGACTG CTAGTATTGC TGTTGAAAAG TCTTAATTGC CCTTCCTTTG	120
TAAGTAATAA CCTTTTATT TGGCTGTGTT AAGCCTTTT TTTTCCTTCC CATTAGTGT	180
TTTGCACTTT TGTATAATGT ATTGAGGGCG TTATTTTTTT CATTCCATCA TTTTATTTT	240
TGTAATCCCA CTGGGGATTC TTTGGGCTTC CTGGATCTGA GGATAATAAT AATGCTCTTG	300
AATAATTGTG GAAAATTCTT AACCATTTATC TCTTTGAATA ATGCCTCTTA TTTTCTCCTT	360
CTATAACTCT AATTAGACAT ATAGTCTATT TTTCATGTTA CTTATGCCTT TTCATCCTTT	420
TTCTCTCCA CATACTCGAG	440

(2) INFORMATION FOR SEQ ID NO:1324:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TAAATGCCC AGTTACCTGA	60
AATTGTATAA ATTCTTGCCA AAAGTGTGTT AACTTAATAC AAACCTCCA TCTCTTACCT	120
CTTAGCACTG TGCTCATCTT GAGGGGACAT AGTCCCAATT TTGTATTTTA TATAATACTG	180
TTAATGAATA TGTGTAGACT TCATATGGTT GTGGGTAAGA GAATACTGCA TTCAGATAGA	240
AAAGATGCTA TATAGCTAAG TTGATCCGCG GATCCTCGAG	280

(2) INFORMATION FOR SEQ ID NO:1325:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

GTTTCCTTTT CTACTTACAA AGAAAATAAA TAGAAATAGA TTTTACATGC TTTATTTCTT	60
TGAGACAAGC CATGTAAAT TGTACTAGA CTAAGTAGTA GTATACCACT CATTGACTGG	120
TCTTTTCAAC TCCACTCAA TTTGTAAAAA GCAATTCCTC TTATACTATC ATCTTTTTTG	180

TTTTTTAAGG TTTTGTGTG TGTTCGGTTT TTTGGCAAAA CATGATACAT TTCTCATGCT 240
 TGATCTAAAG AGGCTTTACA TAAGAGACAG AGTCGCTCGA G 281

(2) INFORMATION FOR SEQ ID NO:1326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

GAATTCGGCC TTCATGGCCT ACTATCTGA ATGTCCAAC CCAACTCCTA ATTATTTTAA 60
 AAATCTATGC ACTTCTTTCA CTTGAATTTC TATGCCCTCA TAGACTTTAC AGGCACATGT 120
 TCTATCACCA ATTAAGAGAA ATTAACTTA CACATTTTAC AACTTATACA TGCAATTTGG 180
 CTGAGCTTAT ACAGCACAGA TCAACATTAC AATCAATTTA CTGCCATGTT AAAAAAAAAA 240
 TCAGTGAACA TTGTTGGGCT GACCTAATTT TTTGAAATAA GTTGCCCATC AGTGTAATTG 300
 ATTGAGCTAT CTGTACAACC CCCAACCTAC CTAAGCAAAG GGCTCGAG 348

(2) INFORMATION FOR SEQ ID NO:1327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 680 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

GAATTCGGCC TTCATGGCCT ACACGGACTT ACATCCTCAT TACTATTCTG CCTAGCAAAC 60
 TCAAACTACG AACGCACTCA CAGTCGCATC ATAATCCTCT CTCGAAGACT TCAAACTCTA 120
 CTCCCACTAA TAGCTTTTTG ATGACTTCTA GCAAGCCTCG CTAACCTCGC CTTACCCCCC 180
 ACTATTAACC TACTGGGAGA ACTCTCTGTG CTAGTAACCA CGTTCTCCTG ATCAAGTATC 240
 ACTCTCCTAC TTACAGGACT CAACATACTA GTCACAGCCC TATACTCCCT CTACATATTT 300
 ACCACTAACC CTCGAGACCA CTTCATATAA ATACTTATTT ATTTCTATT TCCCCTGACT 360
 AGAAATATAA GCTCCATGGT AGCAGAGATT CTGATTGCTG CCTACTCTAT CCCCAGCTCC 420
 TATACTAGGC ACCATGAGTA CATGATCAGA AAATATTTCAT GGAAAAAAT ACATAAATGT 480
 ATAACAATCT TCATTTGTGA GTAAGAAGAT GGGCTCTGGA ATCAGACTGC CTGGATTGAA 540
 ATCCTAACTT CATCACTTAC TAGTCATGGG ATATTTTACC TCAGTTTCAC TTTTGAATAA 600
 TGAAGATAAT AATGTCTACC TTATAGTATT GTGAGGATTA AGTGAATTAA TGCACACAAA 660
 ATTAGGCCAT GAAGGCCGAA 680

(2) INFORMATION FOR SEQ ID NO:1328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 499 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

```

GAATTCGCGG CCGCGTCGAC TGTCAGTGG CTCTTATATA TATTCTTTAT      60
TGTCATTTAC TTTGGTGGAC GAAGAGAAGG AGAGAGTTGG AATTGGGCCT GGGTCCTCAG      120
CACTAGATTG GCAAGACATA TTGGATATTT GGAAGTCTCT CTTAAATTGA TGTTTGTGAA      180
TCCACCTGAG TTGCCAGAGC AGACTACTAA AGCTTTACCT GTGAGGTTTT TGTTTACAGA      240
TTACAATAGA CTGTCCAGTG TAGGTGGAGA AACTTCTCTG GCTGAAATGA TTGCAACCTT      300
CTCGGATGCT TGTGAAAGAG AGTTTGGCTT TTTGGCAACC AGGCTTTTTC GAGTATTCAG      360
GACTGAAGAT ACTCAGGGTA AAAAGAAATG GAAAAAACA TGTGTCTCC CATCTTTTGT      420
CATCTTCCTT TTTATCATTG GCTGCATTAT ATCTGGAATT ACTCTTCTGG CTATATTTAG      480
AGTTGACCCA AAGCTCGAG                                         499

```

(2) INFORMATION FOR SEQ ID NO:1329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

```

GAATTCGCGG CCGCGTCGAC CGCTGCCAAA TGCTTCACTC CTATCTACTC TCCCGATTCC      60
TTATACTTCT GAACCTCCTC AACAGAAATC TTGCTCTCTC CCTAAATCCT CAGTGCAACA      120
TACGTCCGCA AAAACTAAAT GATCCCTCCT CAGCCAGACA GAAAACTCTC AACATATCAA      180
CACTCCCAAG GCGTGGACAG                                         200

```

(2) INFORMATION FOR SEQ ID NO:1330:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 158 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

```

GAATTCGGCC AAAGAGGCCT ACAGTCTTTT TAGGCATGTT TTTTTTTTTT TTGGTGTGTG      60
TGATGACAGG AATATGCATT TTATCTGTAG TGGTTTTAAA TCCTGTATTA AGCGTTGTTT      120
TCTTTTCAGA CTGCAAAATT CAAAATGGGG CTCTCGAG                                         158

```

(2) INFORMATION FOR SEQ ID NO:1331:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 552 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

```

GAATTCGCGG CCGCGTCGAC GATCATGAAG CGCTCGGTAG CCGTCTGGCT CTGGTGGGG      60
CTCAGCCTCG GTGTCCCCCA GTTCGGCAAA GGTGATATTT GTGATCCCAA TCCATGTGAA      120
AATGGAGGTA TCTGTTTGCC AGGATTGGCT GATGGTTCCT TTTCTGTGA GTGTCCAGAT      180
GGCTTCACAG ACCCCAAGTG TTCTAGTGTT GTGGAGGTTG CATCAGATGA AGAAGAACCA      240

```

```

ACTTCAGCAG GTCCTGCAC TCCTAATCCA TGCCATAATG GAGGAACCTG TGAAATAAGT 300
GAAGCATACC GAGGGGATAC ATTCATAGGC TATGTTTGTA AATGTCCCCG AGGATTTAAT 360
GGGATTCAC TGCAGCACA CATAAATGAA TGCGAAGTTG AGCCTTGCAA AAATGGTGGA 420
ATATGTACAG ATCTTGTG TAACTATTCC TGTGAGTGCC CAGGCGAATT TATGGGAAGA 480
AATTGTCAAT ACAAATGCTC AGGCCCACTG GGAATTGAAG GTGGAATTAT ATCAAACCAAG 540
CAAATCCTCG AG 552

```

(2) INFORMATION FOR SEQ ID NO:1332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

```

GAATTCGCGG CCGCGTCGAC CTCAGAACTA TTTAAATTTA GTTAAATTAC TATTATATTT 60
TATAGTAAAT ATTGGTCCAC TTTATAGCTC AGAACCTAAA AAGAGAATAT GTACCCAAAC 120
TTCTCTATGT TTACAACCAA CCCAGAGTTT AAGATTCTGA ATTGTGCTTT GTTTTGTTAA 180
AAATTTAACC AAGGGTCAGG CACAGAGGCT CATGCCTATA ATCCCAGCGC TTTGGGAGGC 240
CGAGGCGGGT GGATCACTTG AGTTCAGGAG TTCGGGACCA GCCTGGCCCG CATGGTGAAA 300
CCCCGTCTCT ACTAAAAATA CAAAAGTTAG CCGGGTGTGG TGGCATGTGC CTGTGGTCCC 360
AGCTGCTTGG GAGGCTGAGG CAGGATAATC NCTTGAACCC AGGAGGCAGA GGTTCANTT 420
GCAGTGAGCC GGGATTGTGC CATTGTACTC CAGCCTAGGC AACAGAGCG AACTCTGTC 480
TTAAAAAAA AAAAGAAAA AAAATTAACC AAGGTTCTCC TTTCTCTAAA TCTAGCAATT 540
TGTTCATTT TTCAGAAATA AACTTAATAA TTTTAATACA GATTTAGCT TTGGCTTTT 600
TCTTACTTTT TAGTTTCAA ATTATTTTAT GGTATTCCTA CAAAGTAGAT ACAAATTTGC 660
ATTGAGAAAT CACCTTTTGT TTTTCTGGGT TTTTGTGTT GTTTGTTTGT TTTTCAGAA 720
AACTCATGGA AAAGTACACT GTTCACCTCA GCATCTCGAG 760

```

(2) INFORMATION FOR SEQ ID NO:1333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

```

GAATTCGGCC AAAGAGGCCT ANAACTGGGT AAGGAGCAAA AAAAGTGACA GAGGCCAGGC 60
GCGGTGGCTC ATGCCTACAA TCCCAGCACT CTGGCCAAAT ATTTGATTTT AAATCCCAT 120
TGTTACTGAT TAAAAAATA AAAAATCTGG ACCAGTTAAC CTGGAGATT AGAGGCTATA 180
GACACAATTT AACATCCATA CAGGCCTGTG AACTTCATGC AGAGAACAAA CAAACAACA 240
AAAACTCTAA TTCAGAGTCT CTCATTTCAG CTTAGCCAAC ACATTGGAG ACTTAGGGGC 300
CAGTTCTAGA AGCTGCTTTT ACCTCTAGAC TCGGAGGGGC AGGCCCTGTC ACCGAAGGGA 360
GGAAACTCT TCTTGGCTGT CAGCCCGGAT TGAAGCCACT TCGCTTCCCC TGGCCCCAGC 420
TTCTCTGCAC TCTTTTACC GTGTCTGACA CAGGGCAAAC CACCAACCAC TCAATGAGC 480
AAACAATTCC AGAAAAAGA ATCCGAGATA AAGAATAACC AACTAGGAGT CTTTCATTG 540
TAGCCTAAAC CGTCGATTGA ATTCTAGACC TGCCTCGAG 579

```

(2) INFORMATION FOR SEQ ID NO:1334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 521 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

GAATTCGCGG CCGCGTCGAC CAACAAGGGC AAAGGCCTTG AGACACAAAC CAACTGTGTG	60
GGTGTAAGG TAAGAAAGGC CAGTGAGGCC AGCATGATGA ACTGGGGGAG CATGGTGGCT	120
GATTTGGTCA GGAAGGGAAC AGAAACCAGA CCACTTGGGA TCTTCTAGCC AGAGTAAAGA	180
GACTGAGTTT ATTCTATTG TAATGGGGAG CTATTCAGAG AGGTTAATCA TGGAAAGTGAT	240
GTGACCTGAG CTACACTCTT AAAAGATGCC TCTGGCTGCT GTGTGGAGAA TGAACCATGG	300
GGGCAAAAGC AGAAACAAGA AGACCACTTA AGAGGCTCTT GCAATAATTT ATGTGAGAAG	360
AGTGATCATC TTGACTAGGG TGGTGGTGGT AGAGGAGGTG AGTGGTGGTC AGGACTGAGA	420
GGAGCCAACA GAATTTGCTG GCTTGCTTGG ATGTGGGTGA TGAGGCAAAAC TGAGAATCCA	480
AGATGGCACC AAGGCTTATA CCCTGAGCAA CTGAACTCGA G	521

(2) INFORMATION FOR SEQ ID NO:1335:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 775 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

GAAATTCGCG GCCGCGTCGA CGCTCTGAG TGAGACCCAA CAAGCTGCTT TTCACCAAAT	60
TGCAATGGAG CCTTTCGAAA TCAATGTTCC AAAGCCCAAG AGGAGAAATG GGGTGAACCT	120
CTCCCTAGCT GTGGTGGTCA TCTACCTGAT CCTGCTCACC GCTGGCGCTG GGCTGCTGGT	180
GGTCCAAGTT CTGAATCTGC AGGCGCGGCT CCGGGTCCTG GAGATGTATT TCCTCAATGA	240
CACTCTGGCG GCTGAGGACA GCCCGTCCTT CTCCTTGCTG CAGTCAGCAC ACCCTGGAGA	300
ACACCTGGCT CAGGGTGCTG CGAGGCTGCA AGTCCTGCAG GCCCAACTCA CCTGGGTCCG	360
CGTCAGCCAT GAGCACTTGC TGAGGCGGGT AGACAACCTC ACTCAGAACC CAGGGATGTT	420
CAGAATCAAA GGTGAACAAG GCGCCCCAGG TCTTCAAGGT CACAAGGGGG CCATGGGCAT	480
GCCTGGTGCC CCTGGCCCCG CGGGACCACC TGCTGAGAAG GGAGCCAAGG GGGCTATGGG	540
ACGAGATGGA GCAACAGGCC CCTCGGGACC CCAAGGCCCA CCGGGAGTCA AGGGAGAGGC	600
GGGCCTCCAA GGACCCAGG GTGCTCCAGG GAAGCAAGGA GCCACTGGCA CCCAGGACC	660
CCAAGGAGAG AAGGGCAGCA AAGGCGATGG GGGTCTCATT GGCCCAAAAG GGGAACTGG	720
AACTAAGGGA GAGAAAGGAG ACCTGGGTCT CCCAGGAAGC AAACAGAGAC TCGAG	775

(2) INFORMATION FOR SEQ ID NO:1336:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 155 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

GTAGATTAG ATGTACAGAT AGAGGTATGA TTTTAAAA AGGCACCTCA GTATGGGTAA	60
TGTTATCTTT CTTGTGTTTC AGTGACACA CATACACACA CACCATAGAT GCAAGGTGTG	120
TAGAAAATGT ATTGAAGGAT ACCAGGTAC TCGAG	155

(2) INFORMATION FOR SEQ ID NO:1337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

```
GAATTCGCGG CCGCGTCGAC ATTCATGCAA ATAAATATAT TACTAAAATG CTACCTGTTT    60
CTTTTCCTC TTTTCTTCC AGTTTAGTT TATGAGATTG GGTCTTGCTA TGCTGCCCAT    120
GCTAGGCATG AACTCGAG                                         138
```

(2) INFORMATION FOR SEQ ID NO:1338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

```
GAATTCGCGG CCGCGTCGAC CTAAACCGTC AATTCTTCCC ATCTTAGGTT TCTCTCCTCG    60
GAAGCCTTCT CTTTAGAATC GAACATTTTC TCTTCTGGCT TTGTTCCGAT GGTTTCTGGT    120
CTGTTTCTTT CTGCTCCCT CGTGGCTTTC ACTTCTGTTT TCTTCCCAG AATGACGGTC    180
CTCTCATTG ACCGTGTGCT TTCCGAAGCA CCTGCTGCCA CCTTGCTCTG GCGATCCCGG    240
TTACTCGAG                                         249
```

(2) INFORMATION FOR SEQ ID NO:1339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

```
GAATTCGCGG CCGCGTCGAC AAAACAACAC ATTTTAAAGA TTACGTGCTT CTTGGTACAG    60
GTTTGTGAAT GACAGTTTAT CGTCATGCTG TTAGTGTGCA TCCTCGAG    108
```

(2) INFORMATION FOR SEQ ID NO:1340:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 652 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GAATTCGGCC	AAAGAGGCCT	AATAGAAGGC	ATTCCATATT	TGTTCAATGA	ATTAACAAAT	60
GTTTTTCATA	TTAATTGTTT	TGATTTTTAC	CTCCTTAGGC	CAGCCTTTAT	TATTGCCATA	120
TAAGCCTTCT	GGTAGTACCA	AGATGTATTA	TGTTCCACAA	TTAAGACAAA	TTCTCCATC	180
TCCGGATTCC	AAATCAGATA	CCACCGTTGA	AAGCTCCCAT	TCAGGATCCA	ATGATGCCAT	240
TGCTCCAGAC	TTCCCAGCTC	AGGTGCTAGG	CACAAGAGAT	GATGACCTCT	CAGCCACTGT	300
TAACATTAAA	CATAAAGAAG	GAATCTACAG	TAAGAGGGTA	GTGACTAAGG	CATCCTTGCC	360
AGTGGGAGAA	AAACCCCTGC	AGAATGAAAA	TGCAGATGCC	TCAGTTCAAG	TGCTAATCAC	420
TGGGGATGAG	AACCTCTCAG	ACAAAAACA	GCAAGAGATT	CACAGTACAA	GGGCAGTGAC	480
TGAGGCTGCC	CAGGCTAAAG	AAAAAGAATC	TTTGCAAGAA	GATACTGCAG	ATTCCAGTGC	540
TGCTGCTGCT	GCAGAGCACT	CAGCTCAAGT	AGGAGACCCA	GAAATGAAGA	ACTTGCCAGA	600
CACTAAAGCC	ATTACACAGA	AAGAGGAGAT	CCATAGGAAG	AACGACCTCG	AG	652

(2) INFORMATION FOR SEQ ID NO:1341:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 817 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

GAATTCGGCC	AAAGAGGCCT	ACGTGCCATT	TCTCTTCCAC	TATGAGAGGA	CCGATTGTAT	60
TGCACATTTG	TCTGGCTTTC	TGTAGCCTTC	TGCTTTTCAG	CGTTGCCACA	CAATGTCTGG	120
CCTTCCCAA	AATAGAAAGG	AGGAGGGAGA	TAGCACATGT	TCATGCCGAA	AAAGGGCAGT	180
CCGATAAGAT	GAACACCGAT	GACCTAGAAA	ATAGCTCTGT	TACCTCAAAG	CAGACTCCCC	240
AACTGGTGGT	CTCTGAAGAT	CCAATGATGA	TGTCAGCAGT	ACCATCGGCA	ACATCATTAA	300
ATAAAGCATT	CTCGATTAA	AAAGAAACCC	AGCCTGGACA	AGCTGGGCTC	ATGCAAAACAG	360
AACGCCCTGG	TGTTTCCACA	CCTACTGAGT	CAGGTGTNCC	TCAGCTGAAG	AAGTATTTGG	420
TTCCAGCCAG	CCAGAGAGAA	TATCTCNTGA	AAGTGGANTT	GCCAAGGCCA	TGTTAAACCAT	480
TGCTATCACT	GCGACTCCTT	CTCTGACTGT	TGATGAAAAG	GAGGAACCTC	TTACAAGCAC	540
TAACCTTTCAG	CCCATTGTAG	AAGAGATCAC	AGAAACCACA	AAAGGTTTTC	TGAAGTATAT	600
GGATAATCAA	TCATTTGCAA	CTGAAAGTCA	GGAAGGAGTT	GGTTTGGGAC	ATTCACTTTC	660
ATCCTATGTG	AATACTAAGG	AAATGCTAAC	CACCAATCCA	AAGACTGAGA	AATTTGAAGC	720
AGACACAGAC	CACAGGACAA	CTTCTTTTCC	TGGTGTCTGAG	TCCACAGCAG	GCAGTGAGCC	780
TGGAAGCCTC	ACCCCTGATA	AGGAGAAGCA	CCTCGAG			817

(2) INFORMATION FOR SEQ ID NO:1342:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

GAATTCGGCC	AAAGAGGCCT	AGCACCATGG	ACAACCCACA	GGCTCTGCCA	CTCTTCTAC	60
TCCTGGGGAT	CCTCACCCCTC	AGAGCCTCTT	CTGGACTTCA	GCAAACCAAC	TTCTCCTCTG	120
CCTTCTCTTC	AGACTCAAAG	AGCTCTTCCC	AGGGGCTGGG	TGTGGAAGTT	CCCTCCATCA	180
AACCTCCCAG	CTGGAAAAGT	CCAGATCAGT	TCCTGGATTG	AAAAGCCTCT	GCTGGAATCT	240
CTGATTCCAG	CTGGTTTCT	GAGGCCCTGA	GTTCCAACAT	GTCTGGGTCC	TTCTGGTCAA	300
ATGTTTCTGC	TGAGGGCCAA	GATTTGAGCC	CGGTTTCCCC	CTTCTCTGAA	ACCCCTGGTT	360

CTGAAGTATT TCCTGATATT TCGGATCCTC AAGTTCCTGC CAAAGACCCC AAGCCTTCCT 420
TCACTGTAA GACCCAGCT TCAAACATTT CTAATCAAGT CTCCCATCTC CTCGAG 476

(2) INFORMATION FOR SEQ ID NO:1343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 726 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

GAATTCGCGG CCGCGTCGAC CAGGAAATGA AGACATTGCC TGCCATGCTT GGAAGTGGGA 60
AATTATTTTG GGTCTTCTTC TTAATCCCAT ATCTGGACAT CTGGAACATC CATGGGAAAG 120
AATCATGTGA TGTACAGCTT TATATAAAGA GACAATCTGA AACTCCATC TTAGCAGGAG 180
ATCCCTTTGA ACTAGAATGC CCTGTGAAAT ACTGTGCTAA CAGGCCTCAT GTGACTTGGT 240
GCAAGCTCAA TGGAAACAAC TGTGTAAAAC TTGAAGATAG ACAACAAGT TGGAGGGAAG 300
AGAAGAACAT TTCATTTTTC ATTCTACATT TTGAACCACT GCTTCCTAAT GACAATGGGN 360
TCATACCGCT GTTCTGCAAA TTTTCAGTCT AATCTCATTG AAAGCCACTC AACCACTCTT 420
TATGTGACAG GAAAGCAAAA TGAAGTCTCT GACACAGCAG GAAGGGAAAT TAACCTGGTT 480
GATGCTCACC TTAAGAGTGA GCAACACAGAA GCAAGCACCA GGCAAAATTC CCAAGTACTG 540
CTATCAGAAA CTGGAATTTA TGATAATGAC CCTGACCTTT GTTTCAGGAT GCAGGAAGGG 600
TCTGAAGTTT ATTCTAATCC ATGCTGGGAA GAAAACAAAC CAGGCATTGT TTATGCTTCC 660
CTGAACCATT CTGTCAATGG ACTGAACTCA AGACTGGCAA GAAATGTAAA AGAAGCACCA 720
CTCGAG 726

(2) INFORMATION FOR SEQ ID NO:1344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

GAATTCGGCC AAAGAGGCCT AGGGACAGCA ATCAAGTTCT AATGGTGCTC ACTTTTTAGG 60
TCACCTTCAT CACAGACTGC TCCAAAGGCA GAGCAATGTG GAACGAACCA GCACATTTAC 120
TTAAGATCAA AGTATGATAC ATCTCTTTGA GCGCCTCACT TCACAATAGG GATCCATTCA 180
TTGGCTTCCA GATGATGTTT ACAGTTTCATG TAACACTGAT ACTGACTTTG TTCCTTATGT 240
TTAGACAGCT TCTCTGTCTA TACTTCTCAG AAACACCATC AACCAGAACA GAGCCACTTA 300
TTATCCACAA AAGTTGCATC AACCAGCTTA CCTTCTGGGA GGGATGGATG GTACCCAAAT 360
ACTCAAACCTG AATCCTATAG TGTGGAGCAA CCAACAGAA AACAGTCCAA GGATTCAGGA 420
AATGGTAAAA ACATTTTAAA TCTAAATAGT AGTTATTTTC ATTTTGTCTT GCTCCACCT 480
CGAG 484

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 125 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

```

GAATTCGCGG CCGCGTCGAC ATGAGTTTAA TTTTTTTTTT TTTTTTTACA CTTTACATAG      60
AAATAGGATT ATGTGGGCTG GGCACAGGGA CTGACGCCTG TAATCCCAGC ACGTGGAGGC      120
TCGAG                                         125

```

(2) INFORMATION FOR SEQ ID NO:1346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 760 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

```

GAATTCGGCC AAAGAGGCCT AGACCCAGCG TACATACTGA ATGATCTCTA CATCTCAGAC      60
TACTGTGTGT GGATTCAGAA AGTCAAATCC AAAAAGTTGG CAGCTCTTGC AGAAGCCTTA      120
AAGGAAGTCT CCCTTACAAA GGCCAGCTG GGGTTAGAAC TGGAAGAAGT AGAAGCAGCA      180
GCACTGCTTG TCCAGGAGGA AGAACTGCA TTAAGAGCAG CCCATTCAGT TTCTGGGCAG      240
CAGACACTTT GCTCCAGCTC TGAGGCAAGT GATTCGGAGG ACTCAGACAG CAGCGTGTCA      300
TCTGGAAACG AAGACTCAGG CTCAGATTCA GAACAAGATG AACTCAAAGA TAGTCCATCT      360
GAGACAGTCA GTTCTTTGCA AGGTCCCTTT CTTGAAGAAA GCAGTGCCTT TCTTATTGTT      420
GATGGTGGAG TACGCAGAAA CACAGCCATC CAGGAGTCTG ATGCCAGTCA GGGAAAGCCA      480
CTTGCCCTCT CCTGGCCTCT TGGAGTGTCT GGGCCTCTGA TAGAGGAGCT TGGGGAACAA      540
CTGAAGACTA CAGTTCAGGT TTCTGAACCC AAGGGCACCA CTGCTGTAAA CCGCAGCAAT      600
ATTGAGGAGA GAGACGGCTG TCAGACACCA AATAATTGAC TCTTAGGTGG TTTTATTGAT      660
TGTTGAGAAA TATGGTAGAT TGGGTTCAT TTACCGAATG AGAATTCTTC ATTTTCACTT      720
TGTAATTTTT CTTAGTATAT AGTCAGCCCA CACTCTCGAG      760

```

(2) INFORMATION FOR SEQ ID NO:1347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

```

GAATTCGCGG CCGCGTCGAC CATTTCGAGA GTCCGTCTTG TAAATGTTTG GCACTTTGCT      60
ACTTTATTGC TTCTTTCTGG CGACAGTTCC AGCACTCGCC GAGACCGCGG GAGAAAGGCA      120
GCTGAGCCCG GAGAAGAGCG AAATATGGGG ACCCGGGCTA AAAGCAGACG TCGTCCTTCC      180
CGCCCGCTAT TTCTATATTC AGGCAGTGGG TACATCAGGG AATAAATTCA CATCTTCTCC      240
AGGCGAAAAG GTCTTCCAGG TGAAAGTCTC AGCACCAGAG GAGCAATTCA CTAGAGTTGG      300
AGTCCAGGTT TTAGACCGAA AAGATGGGTC CTTCATAGTA AGATACCTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

```

GAATTCGCGG CCGCGTCGAC TCTAGGTTTT CTGATTTTGA TGGTAATATG GTATTCTGGG      60
AAATATCTGT CCAAATTATC CTGATCTCTG AACTCCTGCT GTTGAGGTCA GTCAC TTCAC      120
ACAATACCAT GATGACAGCT TTATCAAGCC AGATGCTTAG TCAGAGCTTT CCAAGACCCA      180
GCTTTGGTTT TATCAGCAA ATCCATCCTT CCCACCCCCC ATACACACGC CAGTTTGAGA      240
CTCCTCTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

```

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTC TGGACCTCCT GTGCAAGAAC      60
ATGAACCATC TGTGGTTCTT CCTTCTCCTG GTGGCAGCTC CCAGATGGGT CCTGTCCCAG      120
GTGCAGGTGC AGCAGTCGGG CCCTAGACAG GTGAAGCCTT CGGAGACCTT GTCCCTCAGT      180
TGTACTGTCT CTCTCGGCCG CATGAATGGT CATTACTGGA CCTGGATCCG GCAGACCCCG      240
GGAGGGAGAC TGGAGTGGAT TGGATCTGTC TATTATAATG GAAACAGAGT GTATCACCCC      300
TCCCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

```

GAATTCGCGG CCGCGTCGAC AATTACTACC ATTGTTAAGT GTCTCTTTAA CTAAACTCAT      60
TGTTTAAAG TTTTCTCCCT CTCTGTTTCT AAATCCAAAT TTCTGCTCTG GAATATATGT      120
TAGAAGAGAT ACATTGTGTG GAATGTTTGC ATTTCTTTTA TGAAATGCAG TATCTTTTGG      180
GGAATATTAT GTAAATGAAA TACCAATTAT TTTAAAAGAG CATTTTTGTG TGACATAGTG      240
CTTTCACAAA CTAAACTGG AATTCTTTT TTTAGTCTAT CTATATCTTT TGAAAATGTT      300
GACACAGCTA AGAAGAAGCT GCCTGTTTAT ATCTTAGATG GTCTGACCCT CAGCTACAAG      360
GTATATGCTG ATATTCCTTG TATGAACCGT GTTTTCTGCT AACATTAAAA CATGCAAGTA      420
ATTGGTACT TTCTAATTT GTTTTGTGTT CATAGGTCCC ATGGCCCGTG GACATTGTTA      480
TAAGTTTGGA ATGTCAAAAA ATTTATAATC AAGTGTTTCT TCTCTTATTG CAAATAAAGT      540
GGGCATCCTC GAG                                     553

```

(2) INFORMATION FOR SEQ ID NO:1351:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

GAATTCGCGG CCGCGTCGAC TTTATTTCAG TGGATTCTCT AGGATTTTCT ATATAAAAGA	60
TGTCATCTGA TAGAGTAGTT TACTTCTTCG TTTCCAACCT GAATGGCTTT TATTTCATCT	120
CTTTCCTAAC TGTCTGGCT AGAACCTCCT TTACCACGTT GAATGGAAGT GGCAAGAATG	180
AACATCCTTG TCTTGTCTCT GATTTCGAG	209

(2) INFORMATION FOR SEQ ID NO:1352:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

GAATTCGCGG CCGCGTCGAC AATGGCTTTT CTCCTTCCT GGGTTTGTGT ACTAGTTGGT	60
TCCTTTTCTG CTCCTTAGC AGGGACTTCC AATCTCTCAG AGACAGAGCC CCCTCTGTGG	120
AAGGAGAGTC CTGGTCAGCT CAGTGACTAC AGGGTGGAGA ACAGCATGTA CATTATTAAT	180
CCCTGGGTAT ACCTTGAGAG AATGGGGATG TATAAAATCA TATTGAATCA GACAGCCAGG	240
TATTTTGCAA AATTTGCACC AGATAATGAA CAGAATATTT TATGGGGGTT GCCTCTGCAG	300
TATGGCTGGC AATATAGGAC AGGCAGATTA GCTGATCCAA CCCGAAGGAC AAACGTGTGGC	360
TATGAATCTG GAGATCATAT GTGCATCTCT GTGGACAGTT GGTGGGCTGA TTTGAATTAT	420
TTTCTGTCTT CATTACCCTT TCTTGCTGCG GTTGATTCTG GTGTAATGGG GATATCATCA	480
GACCAAGTCA GGCTTTTGCC CCCACCCAAG AATGAGAGGC TCGAG	525

(2) INFORMATION FOR SEQ ID NO:1353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

GAATTCGGCC TTCATGGCCT AGGCTCCTAA AATAAATAAT CCACATAATT GTAAATGAAA	60
CACATCAAGG ATTTGAGTTA ATAGCCTCTG AGCAGCATTA ATATAGCCAT TAGACTGGAG	120
TATTTGTTAT CAAGAGGGCC AGAGAACCCA CCGCTAAAGC CGTAGGGTGG GAGGAACCTT	180
GGATTGCAGC TACATGGCTT ATGTAGGGAG TTTGTAACAG CCCCAAGCTG AAACCAAGCTT	240
CTACACCCAT GACTGTTGAG TGATTGAATT CTAGACCTGC CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

```

GAATTCGCGG CCGCGTCGAC CAACAAGAGC ACTGGCCAAG TCAGCTTCTT CTGAGAGAGT      60
CTCTAGAAGA CATGATGCTA CACTCAGCTT TGGGTCTCTG CCTCTTACTC GTCACAGTTT      120
CTTCCAACCT TGCCATTGCA ATAAAAAAGG AAAAGAGGCC TCCTCAGACA CTCTCAAGAG      180
GATGGGGAGA TGACATCACT TGGGTACAAA CTTATGAAGA AGGTCTCTTT TATGCTCAAA      240
AAAGTAAGAA GCCATTAATG GTTATTCATC ACCTGGAGGA TTGTCAATAC TCTCAAGCAC      300
TAAAGAAAGT ATTTGCCCAA AATGAAGAAA TACAAGAAAT GGCTCAGAAT AAGTTCATCA      360
TGCTAAACCT TATGCATGAA ACCACTGATA AGAATTTATC ACCTGATGGG CAATATGTGC      420
CTAGAATCAT GTTTGTAGAC CCTTCTTTAA CAGTTAGAGC TGACATAGCT GGAAGATACT      480
CTAACAGATT GTACACATAT GAGCCTCGGG ATTTACCCCT ATTGATAGAA AACATGAAGA      540
AAGCATTAAG ACTTATTCAG TCAGAACTCG AG                                     572

```

(2) INFORMATION FOR SEQ ID NO:1355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

```

GAATTCGCGG CCGCGTCGAC TGAAAAGTAG GTTTTGAAG AGATATATTC GAAATATATT      60
TTTTCACCTG AAAAAAGTAA AAATTTTTTT CAAAAGCAAA TAATTCAACT CTAAAATTAT      120
ACTATTTCAA CATTCTCATT TATGTGAAAG CATGTGATAA ATTGTTGCTG CGTCAGAGAT      180
ATGAGAAACT CCTTTGCATT AGGTGGGCAT TATTCATAGA CTTCTACATG AAAGAGAAGA      240
GAAATAAAG ATGCACCAGG ATTCTCGAG                                     269

```

(2) INFORMATION FOR SEQ ID NO:1356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 713 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

```

GAATTCGCGG CCGCGTCGAA CCCAGCAAAA TGGGGATCTC CACAGTCATC CTTGAAATGT      60
GTCTTTTATG GGGACAAGTT CTATCTACAG GTGGGTGGAT CCCAAGGACT ACAGACTACG      120
CTTCACTGAT TCCCTCGGAG GTGCCCTTGG ATACAACGTG AGCAGAAGGT TCTCCATTTC      180
CCTCGGAGTT GACCCTGGAG TCAACTGTAG CAGAAGGTTC TCCGATTTC TTGGAGTCAA      240
CCCTGGAGTC AACTGTAGCA GAAGGTTCTC TGATTCCCTC AGAGTCAACC CTGGAGTCAA      300
CTGTAGCAGA AGGATCTGAT TCTGGTTTGG CCCTGAGGCT GGTGAATGGA GATGGCAGGT      360
GTCAGGGCCG AGTGGAGATC CTATACCGAG GCTCCTGGGG CACCGTGTGT GATGACAGCT      420
GGGACACCAA TGATGCCAAC GTGGTCTGTA GGCAGCTGGG TTGTGGCTGG GCCATGTCTAG      480
CTCCAGGAAA TGCCTGGTTT GGCCAGGGCT CAGGACCCAT TGCCCTGGAT GATGTGCGCT      540
GCTCAGGACA CGAATCCTAC CTGTGGAGCT GCCCCCACAA TGGCTGGCTC TCCCATAACT      600
GTGGCCATGG TGAAGATGCT GGTGTTATCT GCTCAGCTGC CCAGCCTCAG TCAACACTCA      660
GGCCAGAAAG TTGGCCTGTC AGGATATCAC CACCTGTACC CACTAGACTC GAG                                     713

```

(2) INFORMATION FOR SEQ ID NO:1357:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 925 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

```
GAATTCGGCC AAAGAGGCCT AGAATAATGC ATATACTGCC ATGTCAGATT CCTACTTACC      60
CAGTTACTAC AGTCCCTCCA TTGGCTTCTC CTATTCTTTG GGTGAAGCTG CTTGGTCTAC      120
GGGGGGTGAC ACAGCCATGC CCTACTTAAC TTCTTATGGA CAGCTGAGCA ACGGAGAGCC      180
CCACTTCCTA CCAGATGCAA TGTTTGGGCA ACCAGGAGCC CTAGGTAGCA CTCCATTTC      240
TGGTCAGCAT GGTTTTAATT TCTTTCCAG TGGGATTGAC TTCTCAGCAT GGGGAAATAA      300
CAGTTCTCAG GGACAGTCTA CTCAGAGCTC TGGATATAGT AGCAATTATG CTTATGCACC      360
TAGCTCCTTA GGTGGAGCCA TGATTGATGG ACAGTCAGCT TTTGCCAATG AGACCCCTCA      420
TAAGGCTCCT GGCAATGAATA CTATAGACCA AGGGATGGCA NCACTGAAGT TGGGTAGCAC      480
AGAAGTTGCA AGCAATGTTT CAAAAGTTGT AGGTTCTGCT GTTGGTAGCG GGTCCATTAC      540
TAGTAACATC GTGGCTTCCA ATAGTTTGGC TCCAGCCACC ATTGCTCTCT CAAAACCAGC      600
ATCTTGGGCT GATATTGCTA GCAAGCCTGC AAAACAGCAA CCTAAACTGA AGACCAAGAA      660
TGGCATTGCA GGGTCAAGTC TTCCGCCACC CCCGATAAAG CATAACATGG ATATTGGAAC      720
TTGGGATAAC AAGGGTCCCG TTGCAAAAGC CCCCTCACAG GCTTTGGTTC AGAATATAGG      780
TCAGCCAACC CAGGGGTCTC CTCAGCCTGT AGGTCAGCAG GCTAACATAA GCCCACCAGT      840
GGCTCAGGCA TCAGTAGGGC AACAGACACA GCCATTGCCT CCACCTCCAC CACAGCCTGC      900
CCAGCTTTCA GTCCAGCAAC TCGAG                                         925
```

(2) INFORMATION FOR SEQ ID NO:1358:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 172 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

```
GAATTCGCGG CCGCGTCGAC AAATAAACCC AGCAACTTCA TTCATTTGCC TTATGTTTAT      60
TGAGGGCCTG CTAGTGCTGG GCACTGTTCT AGGCCCTGGG AATTTATTAG TGAGCAAAAC      120
AGCAAAATCT CTGTCCTCAT GGAGCTCACA ATATAGTAGG GAACGACTCG AG              172
```

(2) INFORMATION FOR SEQ ID NO:1359:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 770 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

```
GAATTCGGCC AAAGAGGCCT AAGTCAGTGA GGTGGAGTCC GTTTTGTAGG TCACGCGGCT      60
AGTAATTGGA GCCTGGTTTA GAACCAAGTC AGTCTCATT CAGAATCCAG AACCAGTGAT      120
TTGTAACTGA TGCACTTGTC TCCAAAGGGA TCCAGCACTG GGTTTTCTCA TTTTAAATGC      180
ATCCATTCTT TAAAGCCTCT GTTCACAGTC ACAAGGTGTA CTTTTTAAAG GAACACAGCA      240
CACAAATGTG ACCGCTAGTG GACAGCAGTG GCAGCCAGT TGGATGGCAG AGCCTGGCAT      300
```

```

GCCGACTGGG ACAGAAGCCC CAGCACACGG TGTGATGATG GCGTCTCCAG GCTGACCTCC 360
ATGGCCTCAG GAATCAAAGT CCTCGGTCTC TTTACGCGG GGTTCAGAAA GAAAACTCGG 420
CTATCTTACA TCTCCTCTCC CTGTTTATT TGAATAAGT GAAGTTCATG TGGCTTGAGC 480
CTCGTTTCTT GGGGAAATCA GCCTGGCTTA GGATTCCATT GTCTTCTGGG ACTGGGAAGA 540
TGTGGAAGGC TGACCTCACG CCCAGCTGAA GGTACCTTC CCAGACTCTG AGCTCGGCTG 600
CCTTCTGCAT CGCCACGGCT GGAGGGCCTG GCCCAGGCCG TGGCTGCATG CTGGCTTTCC 660
ACTGTCTCGG TGTCCCTGCT GCCTGTCAGT AATGTGCCCA GCACCTTCTG GTGTCATGTC 720
CCCTCTTGTT TGTGATTCTT TTCCTGAGCT AGTCCATTTT CTACCTCGAG 770

```

(2) INFORMATION FOR SEQ ID NO:1360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

```

GAATTCGGCC AAAGAGGCCT ACTCAGTGGG AACCTTTAAA CCCTAAAATC CAGGAAAAGA 60
AAATAAATAC ATTATCATGG ACCTGAGGGA TTTTACCTG TTGGCTGCTC TGATTGCCTG 120
TTTAAGGCTG GATTCCGCAA TAGCTCAAGA ACTTATTAC ACTATTAGAG AGGAATTGCC 180
TGAAAATGTG CCCATAGGAA ACATACCAA GGATCTGAAC ATTTCTCACA TCAATGCTGC 240
CACAGGGACC AGCGCCAGCC TTGTCTACAG ACTGGTTTCT AAAGCTGGGG ATGCCCTTT 300
GGTGAAAGTA TCCAGCAGCA CTGGGGAAAT TTTCACAACC TCCAACAGAA TAGACAGAGA 360
AAAACTCTGT GCTGGCGCCT CATATGCTGA GGAGAATGAG TGTTTCTTTG AACTTGAGGT 420
GGTGATCTCT CCAATGATT TCTTCAGGCT GATCAAAATA AAAATAATTG TCAAGGATAC 480
CAATGATAAT GCCCCAATC TCGAG 505

```

(2) INFORMATION FOR SEQ ID NO:1361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

```

GAATTCGGCC AAAGAGGCCT AAATTGTTC TCTCCAAACC AGAAGACCTT AGGTACAGAT 60
GACCCAGGG AGCTGGGACA GCAGGACAGA NAGGGGAAGG GACAGGTCCA TATATAGGTG 120
TGTCATTGCA GCCACTGCAA TGAACATAAC ATGCAAGAAA TGTACAGAAAT GTGGTCCAGA 180
ATTGCCCCACT GGTGCTCTGT GCCCTGGTGG ACCCCACAGA GGAAGTCCCC AGGCTTTCAC 240
TTTCTTCCC CATGGATTGA GCAAGCTCCC AGGGCAGGAT GGTGGGCCAG GAGGGGCAGA 300
ACGCTGGCGG GGACGGGGAA GCCAAGTGCT CACAGGACCA TCCACCACAG CTGCAGCCAC 360
ACTGCAAGAC GGCAGGGATG GGACACACGG TCTAGTTCTT AGTTCTGCCT CCTACAGGCA 420
GCCCCTGCTG TCACTCCAGA ACTAATTCTC TGTGTGCCAC TCACTCGCGT GTGTGACACA 480
CAACAGATAC ACATACATAG ACACATACGT ACATCTCCTC CCCCAATCTC ACCCTCTCAC 540
CACGCCCCTC GAG 553

```

(2) INFORMATION FOR SEQ ID NO:1362:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 855 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

```

GAATTCGGCC AAAGAAGCCT AGTCAACTTG ATCCAAACCT GTTGGTGAAG CAGCAGACTC      60
CACCATCTCA GCAGCAGCCA CTCCATCAGC CAGCCATGAA GTCTTTCCTT GACAATGTCA      120
TGCCCCACAC TACACCTGAG CTGCAAAAAG GGCCATCACC AATAAATGCT TTCAGCAACT      180
TCCCTATAGG CTTGAACTCA AACTTGAATG TAAATATGGA TATGAACAGT ATTAAAGAGC      240
CACAGTCCAG ACTAAGGAAG TGGACGACAG TGGACAGCAT TTCTGTGAAC ACATCTTTGG      300
ATCAAAATC CAGCAAACAT GGTGCTATTT CAAGTGGTTT CAGGCTGGAA GAGTCTCCAT      360
TTGTNCCCTA TGACTTTATG AACAGCAGTA CTTCAACAGC CAGTCCTCCA GGTTC AATAG      420
GAGATGGCTG GCCACGTGCC AAATCGCCTA ACGGCTCTAG CAGTGTTAAT TGGCCACCAG      480
AATTTCGTCC CTGGTGAGCC ATGGAAGGT TATCCAAACA TTGACCCTGA AACTGACCCT      540
TACGTCATC CTGGCAGTGT CATAACAAT CTTTCAATTA ATACTGTGCG GGAAGTTGAC      600
CACCTCAGGG ACAGGAACAG TGGGTCATCC TCATCCTTGA ACACCACGCT GCCTTCAACT      660
AGTGCCTGGT CATCCATTCG TGCCTCCAAC TACAACGTTT CCCTCAGCAG TACAGACAAA      720
AGCACTTCAG CCAGAAATAG TGATTCCAAA TTGACATGGT CTCCTGGTTC AGTTACAAAC      780
ACCTCTCTGG CTCATGAGCT GTGGAAGGTC CCTTTGCCAC CTAAAAACAT CACTGCTCCG      840
TCCCGCCACC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 646 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

```

GAATTCGGCC AAAGAGGCCT AAAAAAGTA CATAGTAAGA CTAAGATACC AAGTTGTATA      60
CTAATATTTT TCAGGCCTTG GGCCTCAAAT ATATATATTT ATATATAATA CTCCAGTGTG      120
AACAGCAATT CGATGAAATG TAAATGTAT CTTTTTTTTT TTAATCACA CACAAGTATT      180
CATAACCACA GGGTTCACCA GAAATCTAAA GCAAGGAGAC ACTCACTCAT ATAGAAATGG      240
AGTTACTCTT CCACAGATCG TTCTGATCAA AGGTTTTGGA ACAGAAATGA ATTAATGATT      300
TTTTTGATA ATATCCAACA TGTCCACTAT CAAATACATT TAGTATGAAA AAACAGATGA      360
AGAAAAGGAA CATACATTAG GACAAAGTAT CTGGTTAAAA TGCTGTTTAT TTAATAAAG      420
CCCACTCTCC TTACTTTAGA GCTCCTTGGT GAAATGGAGG TGAGTTTGAT GGAGTGCACT      480
TGATGACCAC TGAAAAACAC GAGCCCTTTC AACAATGTTG CAACACTGTT AGTTTTTGGT      540
TTAAACACAC ACACACACTC ACAAATGCTA AGTGTAACCT ACCAAATCTC GCGGTCAGCT      600
TTTCCAAGAA CTACTGGGGA AAGTTTCAAT GCTGCAAATC CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 502 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

```

GAATTCGGCC TTCATGGCCT AATGGCTTAG CTGAAGGAAA TGCTCCAGAA ATTGGACTGT      60

```

```

GTAAACCATC AGTACAATAA TACGCTGTGT ATGTATGTGT ATATAAAATG AGAATTATGG      120
CATAATTGGA GCATTTGCAAT TAATCAACAA ACTCACATTG AGACAAAACCT TAGTTTTACA      180
GCTGTCTTGA TTAAAGCCAA GTGTTCCATG TTGCTGTGAA GAATAGCCTC TTTCAAATAC      240
TTTGGAAGT AGTTACTTGG AAACCTGTAA AGGTATTACA TTTTATATT TAAACACCTA      300
TAGAGATCTT CAATTCCTTG AGTCTGAGCT TGTGGGTGGA ATTCTAAATT TGTATCATAA      360
TCTGTCTTTT GTGAAACATT TTGAAAATAT GTATATATAA TATTGTATAT GCAAATTGTG      420
TTGTTTCACT TGTAAGGGA AAAGGCTTAT TTTTCTTAT ATTTCTGATA ACTTGTTTTG      480
CATATGACCG GCACTTCTCG AG                                         502

```

(2) INFORMATION FOR SEQ ID NO:1365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 197 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

```

GAATTCGGCC TTCATGGCCT ACAGAAGTAC GGGAAGGCGA AGAAAAGAAT AGAGAAGATA      60
GGGAAATTAG AAGATAAAAA CATACTTTTA GAAGAAAAAA GATAAATTTA AACCTGAAAA      120
GTAGGAAGCA GAAGAAAAAA GACAAGCTAG GAAACAAAAA GCTAAGGGCA TCGATTGAAT      180
TCTAGACCTG CCTCGAG                                         197

```

(2) INFORMATION FOR SEQ ID NO:1366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

```

GAATTCGGCC TTCATGGCCT AGGCCTGGGG TGGGACATTT TGTTTGTGAG AAGCCTGGAC      60
AAGAGGACGA GGTGCACACC ATGTCACTCA CGGATTTGTG AACTCACAGG AGAGGGTTGG      120
ATAGGGCGTG TGAACGTGAG CCCGCGGTGT AGACGATGTG AAGCTGTGGT AACGGGTGGG      180
CTTGTGATGG CACCCGCTGC TCGCAGGAGA GGGTTGGATA GGGCATGTGA ACGTGAGCCT      240
GCAATGTAGA CGATGCCAAG TCGTGGTAAC GGGTGGGCTT GTGACGGCAC CCGCTGCTTG      300
CAGCCTAACT CGAG                                         314

```

(2) INFORMATION FOR SEQ ID NO:1367:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

```

GAATTCGGCC TTCATGGCCT ACTGGTCCCA TTTTCTATT GCAGTGGTCA TCATTTTAT      60
TGATGTATAA TAATATTGTA TCATAAATCT TCATAATATG TGCTTCCAAA GTTTTCTTA      120

```



```

ATTTTICACT AACCTTTGAT TTGGTATTTA ATTTTITAGTT GTCAGAAAGTT TTTAATATTT 180
GTATCATCAA AGCTATCAGG TTATTAAAAA TGACTTCTCA TTTAGACATA CTTAGGCCAT 240
GAAGGTCGAG 250

```

(2) INFORMATION FOR SEQ ID NO:1368:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

```

GAATTCGGCC TTCATGGCCT AGTGAGAGCA CCACACAAAG GACAGGAAAA ACACCAGCAA 60
TACATCAGCT TTACACAGCA GGCAAGTTTC CTGCTCTCTA CAAGTACAGA TGGAACTTGT 120
CTTGTGAATT AACATCCTGA CTACTTTTGT TGATCATCAC ATTTTTCCT CATGAGAGAA 180
ATAATAGTGT TTTATAGGCT CCTGAGAATA GGTTTACTAA AGTCATCGAG ATCTGGGTTC 240
AAATGACACT TCATGCTCGA G 261

```

(2) INFORMATION FOR SEQ ID NO:1369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 408 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

```

GAATTCGGCC TTCATGGCCT AGTTTTTGTG TGTGTTTGTG TTTGTTTTTT GGCAAGAACA 60
GTTAGGAACC AGATCACAGT GAGGTATAGA GTGAATGAGA GTTGAGAATG TAAAGACAAT 120
GGATATAGAT CACTATTTCA GGAAGCTGTT TGTGAGAGGG AGGAGAAAAA TAAACAGTT 180
ACTGAGCAAT AGGTTGGTTG GTAAGGGGGA GGGATTTTTT TCTGAAAGAT GGGAGAAATT 240
TTAACATACT TAAATTTGAT GGGATAAGCC ATGCACTTAT AGGCATTCAG TCAATATATA 300
TTTCACAAAT GAATGAAGAT AAATTAGGGA GAGGTTAATT GGAGATTTTA GGAGAGAGGG 360
AATAATTGAT CATGTAAAGT CATTGATAAG GTGGGAGCAG AACTCGAG 408

```

(2) INFORMATION FOR SEQ ID NO:1370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

```

GAATTCGGCC TTCATGGCCT ACTCGATTAC AGGTCTCCCG CCTGCCATGC AGAAAGTCAT 60
GTATAAGGGA CTCGTCCCGG AGGATAAAAC ATTGAGAGAA ATAAAGTGA CCAGTGGGGC 120
CAAGATCATG GTGGTTGGCT CCACCATCAA TGATGTTTGA GCAGTAAACA CACCCAAAGA 180
TGCTGCGCAG CAGGATGCAA AGGCCGAAGA GAACAAGAAG GAGCCTCTCT CGAGGCAGAA 240
ACAACACAGG AAAGTGTTGG ATAAAGGAAA ACCTGAAGAT GTGATGCCAT CTGTTAAGGG 300

```

GGCCCAGGAG CGCCTGCCAA CGGTACCGCT GTCCGGCATG TACAATAAAT CTGGAGGAAA 360
AGTCTCGAG 369

(2) INFORMATION FOR SEQ ID NO:1371:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 443 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCGGCC AAAGAGGCCT ATTTTITTTT TTTTAACTG ATAGATGGTG CAGCATGTCT 60
ACATGGTTGT TTGTTGCTAA ACTTTATATA ATGTGTGGTT TCAATTCAGC TTGAAAAATA 120
ATCTCACTAC ATGTAGCAGT ACATTATATG TACATTATAT GTAATGTTAG TATTTCTGCT 180
TTGAATCCTT GATATTGCAA TGAATTCCT ACTTTATTAA ATGTATTGA TATGCTAGTT 240
ATTGTGTGCG ATTAAACTT TTTTGTCTT CTCCCTNTTT TTGGTTGTGC GCTTTCTTTT 300
ACAACAAGCC TCTAGAAACA GATAGTTTCT GAGAATTACT GAGCTATGTT TGTAATGCAG 360
ATGTACTTAG GGAGTATGTA AAATAATCAT TTAAACAAA GAAATAGATA TTTAAATTTT 420
AATACTAAT ATGGGATCTC GAG 443

(2) INFORMATION FOR SEQ ID NO:1372:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 770 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

GAATTCGGCC AAAGAGGCCT ACTTCCGGCT GGAGCTGCTG GGCGCGGGAC CTGGGGCGGT 60
TAATTGGAG TGGCCCTGG AGTCAGTTTC CTACACCATC CGAGGCCCA CCCAGCACGA 120
GCTACAGCCT CCACCAGGAG GGCCTGGAAC CCTCAGCCTG CACTTCCTCA ACCCTCAGGA 180
AGCTCAGCGG TGGGCAGTCC TAGTCCGAGG TGCCACCGTG GAAGGACAGA ATGGCAGCAA 240
GAGCAACTCA CCACCAGCCT TGGGCCCAGA AGCATGCCCT GTCTCCCTGC CCAGTCCCCC 300
GGAAGCCTCC ACACTCAAGG GCCCTCCACC TGAGGCAGAT CTTCTAGGA GCCCTGGAAA 360
CTTGACGGAG AGAGAAGAGC TGGCAGGGAG CCTGGCCCGG GCTATTGCAG GTGGAGACGA 420
GAAGGGGGCA GCCCAAGTGG CAGCCGTCCT GGCCACGAT CGTGTGGCCC TGAGTGTTC 480
GCTTCAGGAG GCCTGCTTCC CACCTGGCCC CATCAGGCTG CAGGTCACAC TTGAAGACGC 540
TGCCTCTGCC GCATCCGCCG CGTCTCTGC ACACGTTGCC CTGCAGGTCC ACCCCCACTG 600
CACTGTTGCA GCTCTCCAGG AGCAGGTGTT CTCAGAGCTC GGTTCCTCCG CAGCCGTGCA 660
ACGCTGGGTC ATCGGACGGT GCCTGTGTGT GCCTGAGCGC AGCCTTGCTT CTTACGGGGT 720
TCGGCAGGAT GGGGACCCTG CTTTCTCTA CTGTGTGTC GCTCCTCGAG 770

(2) INFORMATION FOR SEQ ID NO:1373:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 597 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

```

GAATTCGGCC AAAGAGGCCT AGTCTCTTG AAGATCTCTA GGAACCTGCT TTATGAATCT    60
TCATGCTCCT GTGTTGGATG CATATACATT TAGGATAGTT AGGTGTTCTT TTTGAATTGA    120
AACTTTTACC ATTATGTAAT GCCCTTGTTT GTCTTTTAAA ATTTTGTGTT GTTTAATATC    180
TGTTTGTCT AAAATTAGAA TTTCAGCCTC TGCTTTTTTT CTGTTTTCCA TTGCTTAAT    240
AAATTTTCT TCATTCCTT ATTTTAGCC TATGGGTGTC ATTGGATGTG AGATTCATCT    300
CTTGAACACT GTACTACTGG TTCTTGCTTT TTTACTCAGC TTGTCACCTCT GTGCTTTTCA    360
ATTGGGCATT CAAGGCTAGT GTTGATATGT GTGAATTTGT TTCTGTCATC ATGTTATTAG    420
TTGTTTATTA TGCTGACTTG TTTGTGTTT TTCNTTATAG TGTTACTGGT CTGTGCACTT    480
AAGTGTGTTT TTTAGTAGC AATATTTTCT TTTCATATGT AGTGCTTTAT GCGAGGTATT    540
TTGCAAGGAT TTTCTGAATN NTCNGAATT TTATGTGGGC TAAACTAGGG GCTCGAG      597

```

(2) INFORMATION FOR SEQ ID NO:1374:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

```

GAATTCGGCC AAAGAGGCCT AGCCTCCCAG TGTGAGCCAC CGCACCCAGC CTGGATTGTT    60
GAATTCATG CTGGGTCAC CTCAGATTC ATTTTCACAG TCTTTCATGT TTTGGTCATA    120
TGACATTGTA TTTTGCTGCC ATATGACTGA TCTTTTTTTG TTAAATGTGA GATACTTGTT    180
AAAAAATGTT TAGCAATGAA TTGAGGCCTA GTAGCATGTT ATCTTGCTGC AGAAGAGATG    240
GGAGTCTACT TCTGGGGGAT GGTCAAGGGT CCTCCATACA GGCTGCAATT GAAGTCGTCG    300
GTGCAGGCTC AGTCCCTACA AAGGCCAGGG TATTTCTGT CCACCTTTAT TCTGATGCAT    360
GACTCTTCTG GGTCTCAACC AGAGCCAGTG GACTTCAGTA TGGGTGCTT TCATTGGCAG    420
ACCCTCAATC CACTTGTTTT CCATCTAATC CCACTCGAG      459

```

(2) INFORMATION FOR SEQ ID NO:1375:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

```

GAATTCGGCC AAAGAGGCCT AATGGATCTC ATGTGCAAGA AAATGAAGCA CCTGTGGTTC    60
TTCTCTCTGC TGGTGGCGGC TCCAGATGG GTCTGTCCC AGCTGCAGCT GCGGGAGTCG    120
GGCCAGGAC TGGTGAAGCC TCCGAGACC CTGTCCCTCA CCTGCTCTGT CTCTGGTGGC    180
TCCATCAGCA GCAATAGTTA CTCCTGGGGC TGGATCCGCC AGCCCCCAGG GAAGGGGCTG    240
GAATGCATTG GGAGCATCTC TTACAGTGGG AGCACCTACC TCACCCCGTC CCTCAAGAGT    300
CGAGTCACCG TTTCCGTAGA CCCGTCCAAG AACCAGTTAT CCCTGAGGCT GAGCTCTGTG    360
ACCGCCGAG ACACGGCTGT GTATTATTGT GCGGGGGGGT CTCCGGGCGA TTATTCCTAT    420
GAGAATAGTG ATTACCCCGA CCCCCGTAC TATTAGACT CCTGGGGCGG GGAACCCCTG    480
GTCACCGTCT CCTCAGCTTC CACCAAGGGC CCATCCGTCT TCCCCCTCGA G      531

```

(2) INFORMATION FOR SEQ ID NO:1376:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 661 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

```
GAATTCGGCC AAAGAGGCCT AATGACTCAG AAGAAAGAAG TTA CTTTACC ATTTTGTGTT      60
ACACCATTTA AACTGCTTTC TGATTCCAAA CAGTTCAACA TTTTAAGAAA AGCAAGATCT      120
TATATAAAAC ACAGAAAGTT TGATGAAGTG GTCTCCCTTT GCAAGGAGCT AATTCATCTT      180
GCATTGAAAG GATTGTCCTA TTATCACACA TATGACAGAT TCTTTTGGG CGTCAATGTT      240
GTTATTGGTT TTGTGGGATG GATATCTTAT GCCTCTTGTG TGATCATCAA GTCTCATTCC      300
AACCTTATAA AAGGTGTTAG TAAAGAAGTG AAGAAACCAA GCCATCTCCT GCCTTGAGT      360
TTGTAGCTA TTGGCATTTC AGTAGCATT TTTCTGCTGA TTCAAGCCTG TCCCTGGACA      420
TATTATGTAT ATGGTTTGTG GCCACTGCCA ATATGGTATG CGGTTCTAAG AGAATTTCAA      480
GTTATTCAGG ACCTTGTGTT ATCAGTGTTG ACCTATCCTC TGAGCCATT TGTGGGTAC      540
CTGTTAGCCT TTACCCTGGG AATTGAAGTA TTAGTTCTCA GTTTTTTCTA CCGCTATATG      600
CTTACCGCTG GACTTACTGC CTTTGCAGCT TGGCCATTTC TCACTCGGCT GTGGACTCGA      660
G
```

(2) INFORMATION FOR SEQ ID NO:1377:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 117 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

```
GAATTCGCGG CCGCGTCGAC AAAAAAGGTA AAGATGTTGC TGTATGCAAA ATGGACCCAA      60
GTTATGTTTA TTCAAGTTGC CTGTAGAAAC TTAGTGCTCT ATAGCCACAA ACTCGAG      117
```

(2) INFORMATION FOR SEQ ID NO:1378:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 118 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

```
GAATTCGCGG CCGCGTCGAC CTTAAATTTA AACTGGCCT GGTTCGCTT TTTTATCAAG      60
AGAGCTTAAC AGATAAAAAA TGAAATTAGT CTATTTTCTA CTTGCCAGCA GTCTCGAG      118
```

(2) INFORMATION FOR SEQ ID NO:1379:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 229 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

GAATTCGCGG CCGCGTCGAC ATTTTATATA ATATTTTAAA TAAGTTTGTG TACAAAACAA	60
AGATTTGACT GCATTTTGAT TGTGACCCCG TTGCATGAAG TCAGGTGTGG AGTTTCCAC	120
TTGTGGTATC ATGTTGCTGC TGCTCAAGAA GTTCTGATT TTGGAACATT TTGGATTTG	180
GATTTTCACA TTGGGGATAC CTAATGTGAG AGAGACTAGG CCACTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 140 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTCGCGG CCGCGTCGAC GTTGGGGACA TGGTGGGTCT GAGAAAAGTG TTGCCCCGAA	60
CTTCTATCT GGCATTCCT GCGGAGGAAA TAGAATGCGC GCTCTCCGAC AGCATTTCTT	120
GTAACATCCG CGAACTCGAG	140

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 99 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTCGCGG CCGCGTCGAC TCTCAGAAGA GGTTTGTTTA ACTTCTATAA ATACAACCAC	60
TTTCATGCGTT GGCATCTCTT TGAGAAAAGG CTTCTCGAG	99

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

GAATTCGGCC AAAGAGGCCT AGTTTAAAGT CTGTGGAGTA GTATATTTC CTGACTGGTT	60
GGAAATGACA GAGATGGACT GGCCCCCAGA TTCTGCTGT GTTAGAGAAT TCCCAGGATG	120
TTCCAAACAG GCCCACCAGG AAGATCTCAG TGACCTTTAT CAAGAGGGTT GTGGGAAGAA	180
AATGTATTCC TTTTGGAGAG GAACCAACA ACTGCAGGTG CTGAGGTTTC TGGGAATCTC	240
CATTGGGGTG ACACAAATCC TGGCCATGAT TCTCACCATT ACTCTGCTCT GGGCTCTGTA	300
TTATGATAGA AGGGAGCCTG GGACAGACCA AATGATGTCC TTGAAGAATG ACAACTCTCA	360

GCACCTGTCA TGTCCCTCAG TAGAACTGTT GAAACCAAGC CTGTCAAGAA TCTTTGAACA 420
 CACATCCATG GCAAACCTCG AG 442

(2) INFORMATION FOR SEQ ID NO:1383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

GAATTCGGCC AAAGAGGCCT ATTCAGGTGT TTTCATTTGG TGATCAGGAC TGAACAGAGA 60
 GAACTCACCA TGGAGTTTGG GCTGAGCTGG CTTTTTCTTG TGGCTATTTT AAAAGGTGTC 120
 CAGTGTGAGG TGCAGCTGTT GGAGTCTGGG GGAGGTTTAA TACAGCCTGG GGGGTCCCTG 180
 AGGCTCTCTT GTGCAGCCTC CGGGTTCATC TTTAGCAACT ATGCCGTGAG TTGGGTCCGC 240
 CAGGCTCCAG GGAAGGGGCT GGAGTGGGTC TCAAGTATAA GTGACATTGG TGACACCAGA 300
 TACTACGGAG ACTCCGTGAG GGGCCGATTC ACCATCTCCA GAGACAATTC CAAGAACATG 360
 TTGTATTTGG ACATGAACAG CCTGAGAGCC GAGGATACGG CCGTGTATTA TTGTGCGGCA 420
 AGGGATTGGT ATCATACTCG TGGCTATTAC TGGTACTACT TTGACTTCTG GGGCCAGGGA 480
 TCCTTAGTCA GCGATCTCGA G 501

(2) INFORMATION FOR SEQ ID NO:1384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 634 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

GAATTCGGCC AAAGAGGCCT ACTTCAATAT TCTGTTACGG GTTTTTTTAG TCTTTTTTTC 60
 TCTTTGCTTT CCGTGTGTTGG AATTTTCTAT TTCTATATAC TCAAGTTCAG AGATTCCTTC 120
 CTTTTCCATA TCCTGTCTAC TAGTGAGCCC ATCCAAGGCA TTGTTCAATT CTGTTACAGT 180
 GTTTTGATCT TTAGTATTTT TTTTTCATTC TTCATTACAC TTTCTCTCTG CTAACATTGC 240
 CCATAAGTGC TTATATGCTG TATACTTTAT CTGTTGATCA TATTTGTTTT AAATTCCTAA 300
 TCTGATAATT CAACATCTCT GACATGTCTG GTTCTGGTTC TGATACTTGT TGTCAAACCTG 360
 TGGTTTTTTT TCTTTTAGAG TGGCTTTTAA TTTTCTTTT GTTTTTTGT TTTTTTTTGG 420
 ATAGTTGGAC ATGACGTAAT AGATAAAAGC AACTACTGTA AATAGACCTT TAGGAATGTG 480
 GTGGTAAGAT GTGAGAGGAA GAAAAGCATT CTGTAGTCCT GTTAGGTTTC AGTCTTTTAA 540
 CCCATTTATG CTTAGTGTTT TATTACTGGA ACGCTAGGCA TGTGGAAGTT ATTTATATCC 600
 TACTGCTAAA GGTATCACC AAGCTGTACT CGAG 634

(2) INFORMATION FOR SEQ ID NO:1385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 700 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

```

GAATTCGGCC AAAGAGGCCT ACTCAAGTTC AAGGAAAATG AAGACAAAAA GTGATATGAT      60
GGAAGAAAAAC ATAGATACAA GTGCCCAAGC AGTTGCTGAA ACCAAGCAAG AAGCAGTTGT      120
TGAAGAAGAC TACAATGAAA ATGCTAAAAA TGGAGAAGCC AAAATTACAG AGGCACCAGC      180
TTCTGAAAAA GAAATTGTGG AAGTAAAAGA AGAAAAATATT GAAGATGCCA CAGAAAAGGG      240
AGGAGAAAAG AAAGAAGCAG TGGCAGCAGA AGTAAAAAAT GAAGAAGAAG ATCAGAAAAGA      300
AGATGAAGAA GATCAAAACG AAGAGAAAAG GGAAGCTGGA AAAGAAGACA AAGATGAAAA      360
AGGGGAAGAA GATGAAAAAG AGGATAAAAA TGGAAATGAG AAAGGAGAAG ATGCAAAAAGA      420
GAAAGAAGAT GGAAAAAAG GTGAAGACGG AAAAGGAAAT GGAGAAGATG GAAAAGAGAA      480
AGGAGAAGAT GAAAAAGAGG AAGAAGACAG AAAAGAAACA GGAGATGGAA AAGAGAATGA      540
AGATGGAAGA GAGAAGGGAG ATAAAAAGA GGGGAAAGAT GTAAAAGTCA AAGAAGATGA      600
AAAAGAGAGA GAAGATGGAA AAGAAGATGA AGGTGGAAT GAGGAAGAAG CTGGAAGAAGA      660
GAAAGAAGAT TTAAGAAG AGGAAGAAGG AAAGCTCGAG      700

```

(2) INFORMATION FOR SEQ ID NO:1386:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 127 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

```

GAATTCGCGG CCGCGTCGAC CTTAGTGTG TCTTTTCATT CTCTAAAAAG TGTCTTTGTC      60
AGAGAAAAAA AAAATTTTAA TTTTGATGAA ATCCAACCTA TCAATTTTTC TTCTGTGGCC      120
CCTCGAG      127

```

(2) INFORMATION FOR SEQ ID NO:1387:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 128 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

```

GAATTCGCGG CCGCGTCGAC CTCTGTTTCTG TCGTTTTGCT GAATATTTAT TAGCATTCCA      60
TCACTTTGTG TTAAATTAAT AGAAGTTGAG TTCAACAAT GTTTTAAAAA TTCACACAAA      120
TACTCGAG      128

```

(2) INFORMATION FOR SEQ ID NO:1388:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 816 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

```

GAATTCGGCC AAAGAGGCCT AGTTTCTTTT GCTCTACATC TTCACCAGTA TTTGGTGTTA      60

```

```

TCAGTGTTCCT GAATTTTGTG CATTCTGATA GGTGTGTAGA GGTATCTTAT AATTTTAATT 120
TGTGTTTCTC TGATGCCATA TGATGTGTGG GACATCTTTT CATATGCTGA ATTGCCATCT 180
GTATATCTTT GGTGAGGTGT CTGTAAAGGT TGTGGGCCAA TTTTTTAATT GGGTGTGTTG 240
TTTTCTGTG GAATTTTAAG AGTTCCTTAC ACTGTCTCTG TCTGTCTTGT CTGTCTGTCT 300
GTCTGTCTGT NGAGACAGAG CCTCGCTCTG TCACCCAGGT TGCAGTACAG TGGCACAGTC 360
TTGGCTCCCT GCAACCTCTG CCACCTGGGT TCAAGTGATT CTCCTGCGTC AGCCTCCCGA 420
GTAGCTGGGT TTATACCCGT GCACCACCAC ACCTGGCTAA TTTTGTATT TTTAGTAGAC 480
ACGGGGTTTC ACTANGTTAG CCAGGCTGGT CTCGACCTCC TGACCTCAGG TGATCCACCC 540
ACCTTGGCCT CCCAAAGTGC TGGGANGNGA GCCACCACAC CCAGCCTCCT TACACATTTT 600
AGTTAATAGT TCTTTATCAG ATGTGTCTTA TGTAATATT TCCTCCCTAT CTGTGGCTTG 660
TCTTTTCATA CTCTGACAT TGTCTTTTGC AAAAGACAAC AATTTTAAG AAACAAGTAG 720
ACAATTTTAA TGAAGTCTGG CTTATCAGTT CTTTCTTCA TGGTTGGTAC CTTTGGTGCC 780
GTATCTAAAA GTCATCACC AACCACAGAA CTCGAG 816

```

(2) INFORMATION FOR SEQ ID NO:1389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 163 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

```

GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTC TAGACGAACT ATATGTTTAA 60
GCAAAAACAA AAATAAAAT CCTCAAAAAA AGTAATATCA GAGTTTAAAT TTCAACCAGC 120
TGGCACACA ATGAAAGTGT CAGACTTCT GAAAGTACTC GAG 163

```

(2) INFORMATION FOR SEQ ID NO:1390:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

```

GAATTCGGCC TTCATGGCCT AAAACCCCTCA AAAATAAATT AGAATCCAGC ACTGCTACAA 60
TATATTATCT AAAATGTCTA ATTCTCAAAA ATATGAGTGA TGCAAAGAAA CAGGAAACAG 120
TGAAACACAG AGGAAAAAAC AGTGACTAGA AACTGACTTA AGAGTAAGCC CAGATGTATT 180
TGGGAGCCAG AGCCTTCAA GTAGCTATTA AATATGTTCC AAAAATTAA GGGAAATAT 240
GACAATGACT CAAAAATAAG GACTCTAAAT ATAGAAATGG GAGCTG 286

```

(2) INFORMATION FOR SEQ ID NO:1391:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:


```

GAATTCGGCC TTCATGGCCT ACTTTTAAGG GCTTGGAAGT TTCAAAACCA CAGTCTGCAT    60
GTGACAGGTG CTCACTGCTG TTGGGTTGGC CGCTGGTTCT AGGCCTCTGC TGGAGTGTGT    120
GATCTGCTTT CTGACGGCAG GGCCTTCACA TGGGTGTGCT TTAATCTTAC GTCTCCGTCC    180
TCTTTTCCA CTGAGAGTGC TGGTCTCAAG GACAGTGGAG ATGAGAGAAT TGGGAATATCG    240
CATAATGTCT CATCTGTTTT ATCTCTTGCT ACAAACATCA CAATCTCAA ATAACAATGG    300
CAGTACAAC TCCACCTATA TCATTACTGA AAACAGTGAA GATATTTTT GCCTAAGTCT    360
TCCCATTCTG TGTAGTTATG CAGAGTCTCG AG                                     392

```

(2) INFORMATION FOR SEQ ID NO:1392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

```

GAATTCGGCC TTCATGGCCT AGTAATCTTT CCCCCAGTT TTTGGATGAA GAACTAACA    60
CTGAAGGGGC GAGGTGGCCT CCCAGGCTCA GAGGGTGATT CAGAAATCCAG GCCTGGTGT    120
CCTTCCACAG TACCAAAGCG CCACACATTA GTTGTCTTGT AGATTTTCCA CACTTCAGGG    180
AGAAATGCCAA AGTATCTTTG CCTTGCACAC ACTACCTGTT CAACACTCAG TGACGAGGGT    240
GTCGTGTGTG CTCAGGCAAC TCCCGCCCTT CTTCTTTTG CTCGAG                     286

```

(2) INFORMATION FOR SEQ ID NO:1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

```

GAATTCGGCC TTCATGGCCT ACTGAGTTCT CAAATCTAAC GTTTAGGAA TTTTTATTC    60
CTGCAGAGAG TTGGGGAGCT GTTTAAAGT TGTTGGTTT AGCCAGTATA GCTAGATTCC    120
TCAAGGTCAA CACAACGCCA TACTGCTCTA GCTGGGGCTA GATTCTCAT GATAGTCTAA    180
ACTGTGTGAT GGCCAAGTCC CCACTTTGAA GATGTCCAAA TTCAGCCTCA GACATTTCTC    240
CTCAAGAAAG GGGGGGCAAA AAAGCCTTTT GTGCCCTTT CCCAAATTAT TTGCTCATGT    300
CGCAAGACTG AGGTCTCGAG                                         320

```

(2) INFORMATION FOR SEQ ID NO:1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

```

GAATTCGGCC TTCATGGCCT AACGCCATCT ACGACCTGAT CGAGCGCATC GAGGATTGG    60
CGCTGCAGAA CCAGATCCGG GAGCACGTCA TCTCCATCGA GGACTCGTTT GTGAACAGCC    120

```

```

AGGAGTGGAC GCTGAGCCGC TCCGTACCGG AGCTTAAAGT GGGCATAGTG GGGAACTGT      180
CTAGCGGGAA GTCAGCCCTG GTGCACCGCT ATCTGACGGG GACCTATGTC CAGGAGGAGT      240
CCCCTGAAGG GGGGCGGTTT AAGAAGGAGA TTGTGGTGGG TGGCCAGAGT TACCTGCTGC      300
TGATCCGAGA TGAAGGAGGC CCCCCTGAGC TCCAGTTTGC TGCCTGGGTG GATGCAGTGG      360
TGTTTGTGTT CAGCCTGGAG GATGAAATCA GTTCCAGAC GGTGTACAAC TACTTCTCTG      420
GTCTCTGCAG CTTCCGCAAC ACCCCTCGAG                                         450

```

(2) INFORMATION FOR SEQ ID NO:1395:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

```

GAATTCGGCC TTCATGGCCT ACCGTCATTC ATTGCAGGGA CCATCAAACC CCAGACAATC      60
CTATTTTGGT GGGAAATCTA GCAGATAGAG AAGCCAAACA AGTAGCCCTA CAACCTGTAC      120
AAGGCCAGTT TCTGTGCCTG TCCTCGTTCT CTCCTCTTTA CTCTCCAGAA GAAAAGGAGG      180
ACTACCAAGC CAAAACCTT CAAAACAAG GACCATGGTA TGTCAAGGAA GGTGCTTCC      240
TTCTTCTCA CTCTCAAACA ATCTCTATCC TTCGAG                                         276

```

(2) INFORMATION FOR SEQ ID NO:1396:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

```

GAATTCGGCC TTCATGGCCT AGGGGGCGGG GGGCGGGGGG GGTCTCAGAA ATCAGGAGTA      60
ACTCTTTGAA AACTAAATAG TTAAATCT CATCCAACCT CCACCTAACT TACATGCCTG      120
GTTAACCGAC ACTCTGTATA TCCTGTATAA AACATTCTAA CTGATGCCCA CGACATACTA      180
TTGGCTGATG GTTTTGCTAG TATACAGTAT GGCCACTTAC TGCCATTCCC ATGCCCTCGA      240
G                                         241

```

(2) INFORMATION FOR SEQ ID NO:1397:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

```

GAATTCGGCC TTCATGGCCT AGAAAATGAA GAAGAAGATC ATCAAGGACC AGAAACTGCT      60
TGTGATCGTG GGGGGCATGC TGCTGATCGA CCTGTGTATC CTGATCTGCT GGCAGGCTGT      120
GGACCCCTG CGAAGGACAG TGGAGAAGTA CAGCATGGAG CCGGACCCAG CAGGACGGGA      180
TATCTCCATC CGCCCTCTCC TGGAGCACTG TGAGAACACC CATATGACCA TCTGGCTTGG      240

```

CATCGTCTAT GCCTACAAGG GACTTCTCAT GTTGTTCGGT TGTTCCTTAG CTTGGGAGAC 300
 CCGCAACTCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:1398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC TTCATGGCCT AGTGCACACC AAGAACCAAG TTTCAGCTTG GTTACTGTGT 60
 TGAAGACACC TTGCTATAT TTCAAGTCAT TCCTTCTTTT CTCATTTT TTTAATTGAC 120
 AAAAATTTTA TATATCGTGT ACAACATCAA TCCATCTTGG CATCTGTATT TGTCAGGGTT 180
 GTCTTAGAGG GACAGAACTA ATAGGATATA TATAAGGGGG AGTTTATTAA GTATTAACCT 240
 ATATAATCAC AGGGTCCAC AACAGGCTGT CTGCAAGTTG AAGAGCAAGG AGAGCCAGTC 300
 AGAGTGCCGA AACTGAAGAA CCTGGAGTCC GATGTTCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC TTCATGGCCT AGGGCCATGT TGGTTAGAAT GGTGCCATAT TTTCTGGGAT 60
 AGCACCATGC TGGCTGGGAT GGTGCCATGT TGGCTGGGAT GGCACCTGCC TCAGCCTCCC 120
 AAATAGCTGG GATTACAGGC ATCTGCCACC ATGCCTGGCT AATCTTTTGC ATTTTATAGTA 180
 GAGAAGGGGT TFCGTATGT TGTCAAGCTG GTCTCTCACT CCTGAACTCA GGTGATCCGC 240
 CTGCCTCGGC CGCCCAAAGT GCTGGAATTA CAGGCATGAG CCGCCACGCC TGGCCTTTTA 300
 CTTGAGTTT AATAGGATCG CTCTTGCTGC TATTGAGGAT AGTACATATG GGGTAATGAT 360
 GCAAGCAGAG ACCTACTGTA GTACTCTTCA GGAGAGAATG GTGGCTTGCA CAAGGATGGA 420
 AGCAATGAAG GTGGTGAAAA GTGGTCAGTT TCTATATTTA TTAGGAAACA CCTAGGATGA 480
 TATCTTAATA GACCAAAATG TGAATGTAA GAAAAATAGA GATGTCAAGA TGACACAAAG 540
 ATTTTGGCT TTGACAACTG AAAGAATAGT TACTATCAAC TGTGATTGGT AACAAATGCAC 600
 ATGGATCTCT CGAG 614

(2) INFORMATION FOR SEQ ID NO:1400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC TTCATGGCCT AGTTCTATTT AAAAAATAAA CAACTAGACA ATTAAC TAGT 60

TTATTAACCT ATCACAATTG AATTTTTTTT TAATTTTCAG TCTTAACACA TTTTTTAAAA	120
TGTATTAAAG TAATACATTG TAGTAGTAGG ATTATATACT CCTTGGCTGA GAATTCCAAG	180
TACTGTGGTT CTACTGTTTA GTGAAAACT CTGGAAGTTA AAATATAGAA TATGAAACCT	240
CGAG	244

(2) INFORMATION FOR SEQ ID NO:1401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

GAATTCGGCC TTCATGGCCT AAAACAAACA AAAAATTATC TGAATGATCC TGTCTCTAAA	60
AAGAAGCCAC AGAAATGTTT AAAAAGTTCA TCGACTTAGC CTGAGTCATA ACGGTTAAGA	120
AAGCACTTAA ACAGAAGCAG AGGCTAATTC AGTGTCACAT GAGGAAGTAG CTGTCAGATG	180
TCACATAATT ACTTTCGTAA TAGCTCAGAT TAGAATGGCT ACCCCATTCT CTAGACAAAA	240
TCAAATTGTC CTATTGTGAC TCTTCTAAAA ATGAAGATGA AGAGCTATTT AATGACACAC	300
CTTGGATTAA AACGGGAAAC TCGAG	325

(2) INFORMATION FOR SEQ ID NO:1402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 364 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

GAATTCGGCC TTCATGGCCT AAAAGAAAAG AGAAAGTGTT ATTTTCCTGT TAGTGACATG	60
TAGTCCCTTT GTTCTAGTAG GAAAAAAGGT GCCTAGAGGT AGTATATAGA GTAAATATTG	120
TTCTTTAGC CTACTTCCTG CAGCTTCCAA TTTATCCAAG GAAATGTCTA CAACAATTTT	180
GTCAAAAGT CTGTTCTAGT CAATAGCAGG AGAAGTCCAC GTTATTGGGC TGATTTTGCT	240
TACATCAGCA AGAGAAATGT CACGTGATAC TCAGGCCGCG CTTTCTCTTC CATCACACCA	300
TCTTCAAGGA ATGTCAATAA ACCCACTTTG GCTAGGCAGG ATTGAATTCT AGACCTGCCT	360
CGAG	364

(2) INFORMATION FOR SEQ ID NO:1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

GAATTCGGCC TTCATGGCCT AGTTAGGGAC TAACATTGT ATCAACAGTT GATAAATGTC	60
TAAGATTGTT TATTATACAG CAGGGTACAA TGGTAGTGCT AATGCCAACA GGGCACCATG	120
GAAGTTAGTC TAAAAATTAT CGTAGGCTT TATACAAGCA ACAACATATG CTGCTGCTCT	180

TAGAATTTTG GGAAATGATC TGCTTCTAAT ACTAAGCAGT TCTTTAACAT TTTTAAATAT 240
TGAATTCCTAG ACCTGCCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 396 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

GAATTCGGCC TTCATGGCCT AGCAATTGTC TTCAGTTTCC TTATGTTTGC CTTTCTCATC 60
TGTCTCTTTT TCCATTTTAT TCCTACTCTG TCTCAGTCCA CTTACAGTTA TATTTCTTAT 120
CTGTGTATTT TATAATATTT GTGCTTTAAT ACTTTTAAAA TATCCTTTAT TTTACTGTTT 180
CTTCTCTTCC CTTGTATAT TTTAAAGTGT TTTATTTCTC AGCCTTCTAT ATCTTTGCAT 240
TAATTCCTGT CTTCTACAAT AGAGTCCGTT CCAAGCTTTC TGTCTTCTG TGTCTTCCA 300
CGGCTCTGGC TCTCTCTGCA TTATTTCTTA TTTATGGAAT ACAAATCTTT TACCTTGTA 360
TTTTTCTCAC TCCTCTCCAC ACACCCCGGA CTCGAG 396

(2) INFORMATION FOR SEQ ID NO:1405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 444 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

GAATTCGGCC TTCATGGCCT AGACCAAAAT GTCTGCCAG ATAAAGGATA CATTGTGCAT 60
ACATACACTG GGGAGAGGCA GACAAAAA CAATGTAGTT TGAGTGTGTG TGCCTGCTTG 120
CATGCGTGCA TGCAGGCATG TGCAATATA ATGCTAAAC ATGATAAGTA CTATTAAAAA 180
AACAGGTTAG GGTGATTGAA ACTACTAGG TATGAATAAG AGTGGGTTGC AATTTAAAGT 240
AGGGTCATTG TGGTTGGCCT TATGAGGTG ACATTGGAGT CAAGACTTGG AAGAAGAAAG 300
GTTGTTGGCC ACACAGCTAT TGAGGGAAAA ATGTTCCAGA TAGAAGAAAC AGTCAGGGCA 360
ATGCCTTGGG ATGGAATCAT GCATAGAGTA TTCACAGAAT AGCAAGGAAG CTCTAGTTCT 420
AAAGTAAAGT GACTGAGACT CGAG 444

(2) INFORMATION FOR SEQ ID NO:1406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

GAATTCGGCC TTCATGGCCT ACCTAGAAGG TAGTAATGAT AAGCATTAA TTAGAAGTAG 60
GCCTGAAGTT TGCAGTGCAA TGCAGTAAGT ATTTACCGAG TGATTCATAT GAGTAAGGAT 120
GTGATAGCTG CTATAAGAGC TGCAAAAGTT ATTAAGATAC ATCCCTGTCC TGGAAACACT 180

GCCAGCTTCG ATGAGAATAC AACAAATGTTA GATATATTTCG TTTTGGAAGA TACCTTTCCC	240
CCAGTTATTT TCATTTCACA GCTTCTCCAG CCTCCTTCAG CTTCTGTTCT CCCTCTTTCG	300
TTTTCTGTCT CAATTTTCCT GCCCAGCCCT AAATTCACAG AGTAAATCCA CCAGAACCTC	360
GAG	363

(2) INFORMATION FOR SEQ ID NO:1407:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

GAATTCGGCC TTCATGGCCT AGGCTTCAGG GATAACCACG TTCAGGTGGG TTAGACACAC	60
CTCCTGTGGG AGGGTGATTG CAATTAGCTA TCATAAGGCA GGAGACACAA CAGCAACTTA	120
AATTATCCAC AAGCAGAATC ATGAGCTGTT TGCAAAGGGA GTTTCATCG CAAGACAGTT	180
TCACTGTATT TAAGCGAGAT CCTGCCCTCG TACACGATCA CCGCTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1408:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

GAATTCGGCC TTCATGGCCT AGGCTTCTAG AACAGAATG TAGGCAGGCT CCCAAATGGA	60
GAGGTAAACA TGACCGCGTT GTTTGAACT ACTTCATTAA TTGTAAATC AGAACCAAAA	120
AGCTCTGGCC CTCCCACTTC TCTTAGCTGA CCTCCTCCC CACTTACGGA TAAACAGACT	180
TAACTTCCC TAACCCAGAA ACACCTCCAC CAAAATGTA TGGTTATACC TTATCCTAAA	240
AAGGCACCAT GCAGGCATTT AAGACTGAAC CAGTGAATC TAAATATGTA GTAGTAGAAA	300
ATATCACTAA TCAAACTTC CAGCATCAGA TGGTACAAA CCCCAGAGG ACTGGTGACA	360
TGTACCCCGG GATGGCAACC CCAGCTTCTG GCAACCCAC AGCCCAGCGG GAGCTTCAGC	420
TCTGGTCAGG TGCACGGCTG CCAAAGTCTG CACACCTTGG GGACAAGGAA AGGAGACACT	480
TGCTTCATTG TGCTATTCAT GACCCAGTCG AG	512

(2) INFORMATION FOR SEQ ID NO:1409:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

GAATTCGGCC TTCATGGCCT AATGGATTAT ATTTCTATAA CAGTTAGAGT ACTATTCCAT	60
TTATCTCTTT CATTTTGAGT AAAGTTTGGT AGTTTAGGGA GGAATTGATC AATTTCATCT	120
AAATTGAAAG ATTCAAGTAC ATAAAGTTGT TGTATATTA CTTATTATTC TTTTAATGTC	180

TGTGGGGTCT AGTGATGTCT CCTCTTTCAG TTCTGATATT GGTAATTTGT GTCTTCTCTC 240
TTTTTGTGCC AGCATGCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:1410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAATTCGGCC TTCATGGCCT AGGGAGGTGG TTTCTCTATC ATTGCATGAG GTAAGAGTCT 60
GGCCCTGGAT GCTAAGGCTG CAGTTTCTA CAGAAAGGAG TCATCTCTGT GAGGCAGCAT 120
CAGCCTCCAA GACACAGTGT GCTGACCTGG TTTGTATATA AGATGAAAAC AGCTGTTCTC 180
AACTGGCTGA GGCCGGCCAC AGAGAGAGCG GCGGGCTCAG CCTTCACAGG ATTGTCCTTC 240
CACTAAAGGG TAGGGGGTTT TAATCATCGC AGAAAGGAAG TGGGGGTGAA GGTGAGGAAA 300
AATAGAAGCA CGAATTCACC CCTCAGGCCT CAGCTAGAGG AAGCTAAGAG AAGAAATGAG 360
ATTGCATAAC TGTTAAGAAA AAGGCAAGC TGGAGAGAAT GCAGAGGATT CTGGTTCCTG 420
GAGAGAACCT TCAGACTCGA G 441

(2) INFORMATION FOR SEQ ID NO:1411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCGGCC TTCATGGCCT AATTCATTGT CTGGTCCTTT ACAAAGACA TATGCTGGCT 60
CCTGCTCTCT GTGGATGATA GGTCTACAAA GATGTGATT CACTCATATA TGTCTCCAAA 120
TTTATATATT AATTCATATA CTGTTTGTG TTACATTAAT CTAGCATGTG CTTTGGCTT 180
GCTACTGCAG TAAGTTACCT TCTAATTCAT CATTAGGTCA ACTTTATCAA CTCACCTAAG 240
TCCAAAAGTA AATGTAGGTT TCTCCTGGGT TCTTTGTCCT CTTAAGTTT GCCATCCCA 300
AATAAGCACA ACAGAGACCT GCACCAAGAG ACCTTACTTT TAGACTGTAA GCACCAAGT 360
GATTTCTGTA GAGAGAGTGA GCCAGGCTCA GTCTTATGAC TGGCAATACA AGTTGAGGGT 420
AGGAGCTTTG GACAGAACAC TAGCTATGTA TAGTGTTGTC TAGGTGAGTG CTTCTCGAG 479

(2) INFORMATION FOR SEQ ID NO:1412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCGGCC TTCATGGCCT AGCCGATTTA TAAATATGTA TATATAACCT TTCCCTTTT 60
GAGAGATCTC TTAGTAATAG TCAAAGCCAT ACCCTATTCC TTAGTGAGAA AGCCAGTTG 120

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AAACGAATGT AGCAATAGAT GTAAAAACAT TTAAAGGCGT TTAAATGTGG CTTTTTAATG      180
AGCTGGCTTA TGCCTGTAGT CCCAGCACAT TGGGCAGCTG AGCTGGGAGG ATCGCTTGAG      240
CCCGGGAGTT CAAGACTAGC CAGGGCAACA TAGTGAGACC CCATCTCTAT TTAACAAAAA      300
ATGTTTTTAA AGATAAGGAA CAGACTTAAA GTGATGATTG ATTGCTCATA GAACGTTTAT      360
TTTGGGCTCC AGAACTAGGA ATGATGTAGA ATTTATTGTT GTGTCATTGT CTCATTAAAT      420
GCTGTAGTTT CCTATGTCCT TGCCTACCTT CTTTCCTCAG AGCCTCGCAT CTGACCCTCA      480
GAGAGTAGCA GCTCGAG                                         497

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(2) INFORMATION FOR SEQ ID NO:1413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 439 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

```

GAATTCGGCC TTCATGGCCT ACAGGAACAA AAAATGCTAT GCTATTATCT CAAAAATGCA      60
TACTCCTTCC TACTTAAGAA TAATAAATTT ATATATTATG ATATGGTAAA ATTCACAAC      120
AATTGTATTT TTCCTTAGAA TGTTTAAAGC ATTATCTAAT ACCAGCTTCA GTGTCTATAT      180
TACTGTAACT TCATGAAAGA CTACTAACAA TACTGGCTAT CATTATTAA TATTAAGTAG      240
TACTTGCCAG ATGCCGTTAG AGGTGCTTTA AATGCATTCT CATTAGTCT TCGTGTGTAC      300
TACCGTTATC TTCACTTTT AGATAAGGAG ACTAAAGTAT AACTAGAGCT AAGAAACATG      360
AGAAAGACGA CCTAGCTACT GCCTATTTTG TAATCCCAT GGACTAAGCT TGGAGAAGTA      420
AGAACTATTA CTACTCGAG                                         439

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(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

```

GAATTCGGCC TTCATGGCCT AGCCACTTCA AGACGGCAAG TTATTTAGC TCCTGTCTAA      60
ATAAGTTAGT GGGCTCCAGT CCTTAAACCA CTATTTCTT TATTAATTCC TCAAGTACAG      120
ACTTTTGTAT GTAACGATC TTTTAAACC TGTGTATAAT GACTCATTAA TGAGTTGTAA      180
AATAAATGTA GTGAGTTATG ACCAATATAA AAAAATAGAA AAGGCCAGGC ACAGTCGCTC      240
GAG                                         243

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(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:


```

GAATTCGGCC TTCATGGCCT AGTCTTCCAA GACAGGAATC AGCAACCTTT TTTTGTTTTT    60
CTGTATCAGT AATTCATTCT GTATATTTTA AAAAGTTTAA ACCTCTTCTT CCTAGCCCTC    120
CAGTATTTGT TTATAAATTA AAACGTTTCC CAAAGTGTTT TCTGTGAAAC AATAGTTCTA    180
AAAGGTGCTC TAAGAAAAGC TAAGTACATG GCAAAATCCA AAGTATATGT TTTATTCAAT    240
ACATTTGATG AATTTTTTTT GTTTTTCCT CTCGAG                                276

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(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

```

GAATTCGGCC TTCATGGCCT AGAGAGCAGG TTTTAGCTTG CATCCAGCTG TTTCTTGAGT    60
GATGTGTACA GCTTACCCCC AAAGAGGCCA CTGAATTCA GCTGCTCTAA TACCCACACC    120
CTCAACTTAG GTTTAGTCAT AATAAAAAAC AGAATGGATT TGTTAGTTCC ATTGATTGCC    180
ACAAACCTCA CCTTCTGTGT GGCAGAGATG TGCTTTAGTT CTTCAATTGA ATGTTACTTT    240
CAGATCTCAC AAACCTCAAA CCTAGGGCAC CACCAATGAC AAAGAGAATG CTAATAGATG    300
AAATCCTTTG CCAGGTCTTC AAGCTTTCCA CTCCCCTCGA G                                341

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(2) INFORMATION FOR SEQ ID NO:1417:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

```

GAATTCGGCC AAAGAGGCCT AGCCATTATT ATTAAAAAGT AGGATTGCTA CCCGCCATTA    60
CTATTAAAAA GTAGGATTGC TACCCGCCAT TATTATTAAGTAGGATT GGTACCCGCC    120
ATTATTATTA AAAAGTAGGA TTGCTACCCA ACATTATTAT TAAAAAGTAG GATTGCTACC    180
CTCCATTATT ATTAAAAAGT AGGATTGCTA CCTCCATTA TTATTAAAAA GTAGGATTGC    240
TACCTGCCAT TATTATTAAGTAGGATT GCTACCTGCC ATTATTATTA AAAAGTAGGA    300
TTGCTACCTG CCATTATTAT TAAAAAGTAG GATTGCTACC CGCCATTATT ATTAAAAAGT    360
AGGATTGCTA CCCGCCATTA TTATTAAAAA GTAGGACTGC TACCCGCCGT TATTGCACA    420
GCTACCTTAT GAAAGTAGTT TCACGCTGTC TCGAG                                455

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(2) INFORMATION FOR SEQ ID NO:1418:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 573 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

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GAATACCTAG CTTCATGAT TTATGATAGA TATCCTTTAT TGGACCAATT CGTGTCTGTA    60

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ACCAGCCTCC TGTTCCTACT GCCATCCCCT CCTCATGCAC AGATGCCTCC TCCCTTGGCT    120
CCTGCTCTGA TCCCTGTACC CAGCTTGTCCT CCTGCAAGCA TGTTCCTCTC CCTTGCCAG    180
GCTCTGACAC CCCACACATG TGTGGATCCC CTCCCCTGTC CCAGCTCTGA TACCCCTTGC    240
ATGTGTGGCT GCCCCTCACC TGGGTGTCCT CTTCCCTGTC CCAGCTCTGA CACCCACGCA    300
TGTGGGGCTG CCCCCTGCCT AGGTGTCCCC TCCTCTGCTC AGGCTCTGTC CTCCTGCGGT    360
TGGCTTTCCC ATTCTGGATG CACCTCACAC ACAGCCTTGT CATCTTTGGA TGAATTTGGC    420
CTCCCCCATC CACTGCTGGT GCAGATGCTT CCTTACGGGG CCTTGCTCTGA TGGCTTTAGG    480
GCTGAATCAT GCAGGAAGGA AGGAGAAGGA CAAGAAGAAA AGGGAAGGCT GGGGAAGGAA    540
GCGGGTGGTA AAATTGGTTC ACAAGCCCTC GAG                                     573

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(2) INFORMATION FOR SEQ ID NO:1419:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 188 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

```

GAATTCGGCC AAAGAGGCCT ATTTTAAAAA AAACATATTA ATTTTAAAT TTATTTTGG    60
TTGTTTTTTG CACAATGAAG TTTCAGCTTC TCAACCTTCT CCCCTACCCA GGGCTGTGGA    120
CCCAGACTGG CCTTGAGCCA CAGTCCCTCT TTCCTCCTC ACCCTCTTCC CCCTCCGGGC    180
ACCTCGAG                                     188

```

(2) INFORMATION FOR SEQ ID NO:1420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

```

GAATTCGGCC AAAGAGGCCT ACGAGGAAAG ATCTAATTAT CATGGACCTG CGACAGTTTC    60
TTATGTGCCT GTCCCTGTGC ACAGCCTTTG CCTTGAGCAA ACCACAGAA AAGAAGGACC    120
GTGTACATCA TGAGCCTCAG CTCAGTGACA AGGTTCAACA TGATGCTCAG AGTTTTGATT    180
ATGACCATGA TGCCTTCTTG GGTGCTGAAG AAGCAAAGAC CTTTGATCAG CTGACACCAG    240
AAGAGAGCAA GGAAAGGCTT GGAAAGATTG TAAGTAAAT AGATGGCGAC AAGGACGGGT    300
TTGTCACTGT GGATGAGCTC AAAGACTGGA TTAAATTTGC ACAAAGCGC TGGATTTACG    360
AGGATGTAGA GCGACAGTGG AAGGGGCATG ACCTCAATGA GGACGGCCTC GTTTCCTGGG    420
AGGAGTATAA AAATGCCACC TACGGCTACG TTTTAGATGA TCCAGATCCT GATGATGGAT    480
TTAACTATAA ACAGATGATG GTTAGAGATG AGCGGAGGTT TAAATGGCA GACAAGGATG    540
GAGACCTCAT TGCCACCAAG GAGGGTCTCG AG                                     572

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(2) INFORMATION FOR SEQ ID NO:1421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

GCAAGACGGC	TACTGAGGCA	GGAGAATCGC	TTGAACCCAG	GAAGCGGAGG	TTGCAATGTG	60
CCAAGATCGT	GCCACTGCAC	ACTCTAGCCT	GGGCAACAGA	GCAAGACTGT	GTCTCAAAAA	120
AAAAAAATCT	TNGACNAAAC	ATAGTTGTTN	ACATACTTCT	TTAATCCCAG	AGTTAGTTTT	180
AAAAAANNACA	TGATTGCTGT	TTTGTCATAT	TATCTCAGCG	GTCTAAAATT	AACCTAGCCA	240
TGTGCAGGAA	TGGGTAAAGT	CCCCTTAAAC	AAAAATGGGG	TTAGTTANGT	TAGTTCTTTT	300
GCCATTTTAC	TGGTCATATA	CCTGAAGCGC	TTAGCCTGAC	ACAATTGAAC	GCCAGACGGA	360
AGCCGNGATC	AGCGGTCCTG	ACGGGGGTCA	GAGTCAGACC	AGGGGTCTTT	TACCCAAGTG	420
GGGAAGATTG	GGAAAGGCCT	AGGATCAGAG	AGGGAAATGG	GTCCCTGGTT	GCCCATGGAC	480
CTAATGGGGT	CTCTCGAG					498

(2) INFORMATION FOR SEQ ID NO:1422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 827 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

GAATTCGCGG	CCGCGTCGAC	GAGGAAACCA	GCCAAGGACT	AACTACGACC	ATGAGATTGG	60
CAGTGATTTG	CTTTTGCCCTG	TTTGGCATTG	CCTCCTCCCT	CCCGGTGAAA	GTGACTGATT	120
CTGGCAGCTC	AGAGGAGAAG	CTTTACAGCC	TGCACCCAGA	TCCTATAGCC	ACATGGCTGG	180
TGCCTGACCC	ATCTCAGAAG	CAGAATCTCC	TTGCGCCACA	GAATGCTGTG	TCCTCTGAAG	240
AAAAGGATGA	CTTTAAGCAA	GAAACTCTTC	CAAGCAATTC	CAATGAAAGC	CATGACCACA	300
TGGACGACGA	TGATGACGAT	GATGATGACG	ATGGAGACCA	TGCAGAGAGC	GAGGATTCTG	360
TGGACTCGGA	TGAATCTGAC	GAATCTCACC	ATTCGGATGA	GTCTGATGAG	ACCGTCACTG	420
CTAGTACACA	AGCAGACACT	TTCCTCCAA	TCGTCCCTAC	AGTCGATGTC	CCCAACGGCC	480
GAGGTGATAG	CTTGGCTTAT	GGACTGAGGT	CAAAGTCTAG	GAGTTTCCAG	GTTTCTGATG	540
AACAGTATCC	TGATGCCACA	GATGAGGACC	TCACCTCTCA	CATGAAGAGC	GGTGAGTCTA	600
AGGAGTCCCT	CGATGTCATC	CCTGTTGCC	AGCTTCTGAG	CATGCCCTCT	GATCAGGACA	660
ACAACGGAAA	GGGCGACCAT	GAGTCAAGTC	AGCTGGATGA	ACCAAGTCTG	GAAACACACA	720
GACTTGAGCA	TTCCAAGAG	AGCCAGGAGA	GTGCCGATCA	GTCCGATGTG	ATCGATAGTC	780
AAGCAAGTTC	CAAAGCCAGC	CTGGAACATC	AGAGCCACGG	CCTCGAG		827

(2) INFORMATION FOR SEQ ID NO:1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

GAATTCGCGG	CCGCGTCGAC	GGGAGAGGAA	GGGTTGGGCA	GGATGGAATA	TTAAATTGTA	60
ACATGATAAA	CATGCAAGAC	TGTTATCCAA	TCTAGATAAT	TTATATACAT	TTTGATGACT	120
TAGGAAAACA	AAGCAATCAT	TTGTGACAAG	CCTAAAAAGC	TTGACATATT	TAACATACTT	180
AGGAACTTTT	TTTGTGCGGT	GGGAATTCTC	TAATTGTATC	ATGTGGGCCT	TTTGAAAGTA	240
ACAAACAGAA	GGCCAGTCTG	TTGCAAGTTT	GCTGCTGAAC	ATCACATTCC	ACCCTAAGAA	300
AACACAAGGT	GGATTGCATC	GAGGTGGAT	ACCTTACCTT	AGCACAGA		348

(2) INFORMATION FOR SEQ ID NO:1424:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 152 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

```
GAATTCGCGG CCGCGTCGAC TTGAGAATG TGGCCTCTGA TCACTAACCA GGGTTTTCTC      60
TTTACACTGG CTGTTTACT TATTCTTCA CCAAAGCCAG GGAACGTCCC TTTAGCTACT      120
GCAGCATTC TAACAGATGC GACAAATCAC AG                               152
```

(2) INFORMATION FOR SEQ ID NO:1425:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 206 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

```
GAATTCGCGG CCGCGTCGAC CTAAACCGTC GATTGAATTA GACCTGCCTC GAGATGCGCC      60
ACTTCTGCT CACCCACCTT AGAGCCTTG CATATGCAGT TGCTTCCTCA GAGTATTGCC      120
ATCCCCAGCA CGACCCCCAG CTCATTCTTC AGGCCACTAA CGTAAATGTT ACTTTCTCAA      180
AAACACCCCTC TCCATCCCGG CACCCA                               206
```

(2) INFORMATION FOR SEQ ID NO:1426:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 353 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

```
GAATTCGCGG CCGCGTCGAC GTGGGTACTT CATCCTCCTC ATCACTGGTT GGCCTGAGA      60
GCTTCTTAAG ACGCTCCATG AGCTCTTCT CTCTCCATC ATCATCCACA TCCTTCTTCC      120
GCCTGCCTTT TCGGGTATCT CGCTTTTTT TTTGCTGCTG TTGCTGTTGC TGCTGCTGCT      180
GCTCCTTCTC CTTGAGCACT TTCTCTTCT CCCAGCCTG TTTATCTTCT ACTGCCAGCT      240
CTTCAAAGAA CGTTTTTTTG ATCTTCTNGT CCTTCTTCCC TTTCTTCACC ACTTTGTCTG      300
ATGGGCTCGT GCTCTCTCCG TCCCCGATCC ACTCGGGCTC CGGCGGACTC GAG          353
```

(2) INFORMATION FOR SEQ ID NO:1427:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 343 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GAATTCGCGG	CCGCGTCGAC	AGATATTTGG	TTATCTTGAC	TTTTTAAAT	AACATATTTT	60
TACAGGATTT	TGAGTCTGAG	AAGAGAAAGG	TAATATGCAA	GACACTTCGA	TTTGTGTCAC	120
ATTATTATGG	AGCATCATTA	ATGGTTTGTA	CATTTCTTGT	CCTTTGGGCT	TGAATGGACA	180
GTACCAAATT	TGGGGAAATC	AGCAACTTGA	TGCACAGCTA	CGAGGAATAA	ATGCTTTTGC	240
TAATGCACAT	GGTCCCGTTG	CTTTCCCACT	GCTGAAGACC	TCTCCTTACA	GAGTGTTTGA	300
TAATGCATCT	GTTGAACATG	CACTGCTAGA	TGCTCCTCTC	GAG		343

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 542 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAATTCGCGG	CCGCGTCGAC	GAGGGGAAGA	TGTCACGCAA	GATAGAAGGC	TTTTTGTAT	60
TACTTCTCTT	TGGCTATGAA	GCCACATTGG	GATTATCGTC	TACCGAGGAT	GAAGGCGAGG	120
ACCCCTGGTA	CCAAAAAGCA	TGCAAGTGGC	ATTGCCAAGG	AGGACCCAAT	GCTCTGTGGT	180
CTGCAGGTGC	CACCTCCTTG	GACTGTATAC	CAGAATGCCC	ATATCACAAG	CCTCTGGGTT	240
TCGAGTCAGG	GGAGGTCACA	CCGGACCAGA	TCACCTGCTC	TAACCCGGAG	CAGTATGTGG	300
GCTGGTATTC	TTCTGGGACT	GCAAACAAGG	CCCGGCTCAA	CAGTCAAGGC	TTTGGGTGTG	360
CCTGGCTCTC	CAAGTTCCAG	GACAGTAGCC	AGTGGTTACA	GATAGATCTG	AAGGAGATCA	420
AAGTGATTTT	AGGGATCCTC	ACCCAGGGGC	GCTGTGACAT	CGATGAGTGG	ATGACCAAGT	480
ACAGCGTGCA	GTACAGGACC	GATGAGCGCC	TGAAGTGGAT	TTACTACAAG	GACACTCTCG	540
AG						542

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

GAATTCGCGG	CCGCGTCGAC	TTAAGAGTCT	GCTTCGGAGA	CCGTAAGGAT	ATTGATGACC	60
ATGAGATCCC	TGCTCAGAAC	CCCCTTCCTG	TGTGGCCTGC	TCTGGGCCTT	TTGTGCCCCA	120
GGCGCCAGGG	CTGAGGAGCC	TGCAGCCAGC	TTCTCCCAAC	CCGGCAGCAT	GGGCCTGGAT	180
AAGAACACAG	TGCACGACCA	AGAGCATATC	ATGGAGCATC	TAGAAGGTGT	CATCAACAAA	240
CCAGAGGCGG	AGATGTCGCC	ACAAGAATTG	CAGCTCCATT	ACTTCAAAAT	GCATGATTAT	300
GATGGCAATA	ATTTGCTTGA	TGGCTTAGAA	CTCTCCACAG	CCATCACTCA	TGTCCATAAG	360
GAGGAAGGGA	GTGAACAGGC	ACCACTAATG	AGTGAAGATG	AACGTATTAA	CATAATAGAT	420
GGTGTTTTGA	GAGATGATGA	CAAGAACAAAT	GATGGCATA	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

GAATTCGCGG CCGCGTCGAC GCTGTTTCATG AGGAGACTTA ACCACAATTC AAAGTGTAGC	60
AGTTGTGTAT TTTAGCATT AATATTTGA TTGAGGCCCT GAGGTGTAA TATCTCAATC	120
TCAGAGTTAG ATGTTTCATG CTTTTTGAA TTTTAAAC ATTTTCATA ATTTTTTTT	180
TAAGTTAGG AGCACATTGA GTGAAGTTCT CTGTGTAGAA CAATACCTTC TGCTCTGCTT	240
CTCCAGCTT TCACTGAGG CTGGAAGG ACAGGCCTGT CCAGCTGTAC TGTCCCACTG	300
TGTATGGGA AGCTCAGGCT CTGGTGAAG CAGGGGGCAT GGATGTCAA CAACTGATGT	360
GCAAACTC GAG	373

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 632 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

GAATTCGGCC TTCATGGCCT ACTACTGATG AGAACATTAT CTGCATATGC CAAAAAATTT	60
TAAGCAAATG AAAGCTACCA ATTTAAAGTT ACGGAATCTA CCATTTTAAA GTTAATTGCT	120
TGTCAAGCTA TAACCACAAA AATAATGAAT TGATGAGAAA TACAATGAAG AGGCAATGTC	180
CATCTCAAAA TACTGCTTTT ACAAAGCAG AATAAAGCG AAAAGAAATG AAAATGTTAC	240
ACTACATTAA TCCTGGAATA AAAGAAGCCG AAATAAATGA GAGATGAGTT GGGATCAAGT	300
GGATTGAGGA GGCTGTGCTG TGTGCCAATG TTTGTTTGC CTCAGACAGG TATCTCTTCG	360
TTATCAGAAG AGTTGCTTCA TTTCATCTGG GAGCAGAAAA CAGCAGGCAG CTGTTAACAG	420
ATAAGTTTAA CTTCATCTG CAGTATTGCA TGTAGGGAT AAGTGCTTAT TTTAAGAGC	480
TGTGGAGTTC TTAAATATCA ACCATGGCAC TTTCTCCTGA CCCCTTCCCT AGGGGATTC	540
AGGATTGAGA AATTTTCCA TCGAGCCTTT TAAAAATTGT AGGACTTGTT CCTGTGGGCT	600
TCAGTGATGG GATAGTACAC TTTCACTCG AG	632

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

GAATTCGGCC TTCATGGCCT ACTAATTTCC AAGAGCTAAA CTTTATACCG CCTGCAATAT	60
TTCCATTAC TACCAGTTTT TTTCTGACCT AGTCAGATAT AAGAAGCCCC CTACTGGAT	120
ACAAGACAGT TAATTATCAG ATCCAGTCTG ATCCTAGATC CAGTCTGATC CTAGACCCAG	180
TCCAGTTTCT GTTGTGACTT CCAAACCCAG TTTGGATCAG AAATTGCTC AAAGAACTA	240
GGAGAGCTCA AAACACAAAT ATGTGGAGCT TCTGAATCTG AGAGAGAACG AACTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 335 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

GCGTGGTTTC ACCTTGTGG CCAGGCTAGT CTGAACTCC TGACCTCAGG TGATCCACCC	60
ACCTCGGCCT TCCAAAGTGC TGGGATTACA GGCATGAGCC ACCGCATCTG ACTGGTGAC	120
TTTACTTTGA CCTGTCATAA ATCCCTTGGT TTGTTATTAC TAGTTTTTAC TTTAGACAGC	180
AATTATCTTT CAAGGAAAAA TTTAAAAGGA AAAAATGTCT TATATTTACC CTCATGTTTA	240
CCATTCCCAG TGCTCTTTAT TTCTTTATGT CAATCCGGAT TTCAATTGT TATCATACTG	300
TTCTGCCTG AATAACAGTT TAACAGCAAC TCGAG	335

(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 316 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

GAATTCGGCC TTCATGGCCT AATGCTCTGT GTCACTGTCT CCCGGTGCTC AGCACAGACA	60
AGTTCAAGAC AGATTTTTAT GATCAATGCA ACGACGTGGG GCTCATGGCC TACCTCGGCA	120
CCATCACCAA AACGTGCAAC ACCATGAACC AGTTTGTGAA CAAGTTCAAT GTCCTCTACG	180
ACCGACAAGG CATCGGCAGG AGAATGCGCG GGCTCTTTT CTGATGAGGG TACTTGAAGG	240
GCTGATGGAC AGGGGTCAGG CAACTATCCC AAAGGGGAGG GCACTACACT TCCTTGAGAG	300
AAACCACTGT CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 383 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

GAATTCTAGA CCTCCCACCC TGTAGAACAT TCTCCTCACT TAGGAGATAG TCATATTTTC	60
AGGCTGCCTT TGAACTGTG GGTACACAAA CAGCAGAGCG ATCTATTTCA GCAGTTGAAG	120
TTGTATTTGA GCCATTATTT CTTCCTCTCT CTTTTTGGTT GAGTTTCTAG GAAGGAAAGG	180
GCTGAACTCC ATGACTGCTC ATATTACAGT GCTAAGTCCT CACAGCCATC CACTGTTTAT	240
ACACAAGAAG AACTAGGCC CACCAAGAGT AAGCGCCTGC CTGAGGTCCG TGAGTGAGTA	300
AGGGCCAAAG GTGAGGTTGG GATCTGGCCC TTTCTCTTTT CTGGCCACCA CAGGGCACTA	360
CCTCCCATAC CCACACTC GAG	383

(2) INFORMATION FOR SEQ ID NO:1436:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 303 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

GGAGAACTGC TAAGGTCCAC AACGTCGACA ATTGAAAGCT TTGCTGCACA AGAAAAACAA	60
ATGGAAGTTT GTGAAGTATG TGGAGCCTTT TTAATAGTAG GAGATGCCCA GTCCCGGGTA	120
GATGACCATT TGATGGGAAA ACAACACATG GGCTATGCCA AAATTAAAGC TACTGTAGAA	180
GAATTAAAAG AAAAGTTAAG GAAAAGAACC GAAGAACCTG ATCGTGATGA GCGTCTAAAA	240
AAGGAGAAGC AAGAAAGAGA AGAAAGAGAA AAAGAACGGG AGAGAGAAAG GAAAGAACTC	300
GAG	303

(2) INFORMATION FOR SEQ ID NO:1437:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 228 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

GAATTCGGCC TTCATGGCCT AGACTTTTAC ACATTTTAT TAGCTACCTG GAATTATTTT	60
TGTAACACGT TAAGTGTAAG TAAACAAATA ATGCTTTGCT TTTTGTTC TGGAAATTATT	120
GTTGTATTTC TTGCCAAAT GCATATATCT TCAGGTCTTT TTTTATAAC CATATGCATA	180
CCAAGGCACC ATTCCATTGA CTTTCCAAC TCTGTCCCAA CCCTCGAG	228

(2) INFORMATION FOR SEQ ID NO:1438:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 498 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

GTGAATTCCA GTCCCCACCC AGAAACCCGC AGCATGATTG TCTGCCTCCT TTTCATGATG	60
ATTTTATTGG CAAAGGAAGT TCAACTGGTA GACCAAACAG ATTCACCTTT ACTTAGTCTC	120
CTTGGACAGA CAAGCTCACT TTCAATGGCAT CTTGTGGATA TTGTGTCGTA CCAGAGTGTG	180
CTAAGTTATT TCAGCAGCCA TTACCCGCCG TCCATCATCC TGGCAAAAGA ATCTTATGCT	240
GAATTAATCA TGAAGTCCT AAAAGTGTCT GCGGGCCTTT CTATTCCTAC TGACAGCCAG	300
AAGCATCTTG ATGCAGTTCC AAAATGCCAA GCTTTTACTC ATCAGATGGT TCAATTCCTC	360
AGCACCTGG AACAAAATGG AAAATCACC TTAGCAGTCC TAGAACAGGA AATGTCTAAG	420
CTCTTAGACG ATATCATTTG CTTTAACCG CCCGACATGG ACAGCCAGAC CCGCCACATG	480
GCCCTCAGCG GTCTCGAG	498

(2) INFORMATION FOR SEQ ID NO:1439:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 314 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

GAATTCGGCC	TTCATGGCCT	AGCAGGGAGA	GGGGTTCTGT	GCTCCTGAGA	TTAGTTCAGA	60
TGGTCTAACC	ATTGTTCTAT	ATGTGCATT	TAGTTAATAT	TGTGTATTAA	AGGATAAGTC	120
TTAATGCTCA	AAGTATGTTA	AAAATAGATG	TAGTAAATCA	GTCCCTTTGT	GAATGTCCTT	180
TTGTTAGTTT	TTAGGAAGGC	CTGTCCTCTG	GGAGTGACCT	TTATTAGTCC	ACCCCTTGGA	240
GCTAGACATC	CTGTACTTAG	TCACGGGGAT	GGTGAAGAG	GGAGAAGAGG	AAGGGTGAAG	300
GGAAGTGGCT	CGAG					314

(2) INFORMATION FOR SEQ ID NO:1440:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 424 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

CCAGCCGTCT	GCAGCTCCGG	CCGCCACTTG	CGCCTCTCCA	GCCTCCGCAG	GCCCAACCGC	60
CGCCAGCACC	ATGGCCAGCA	CCATTTCCGC	CTACAAGGAG	AAGATGAAGG	AGCTGTCCGT	120
GCTGTGCTC	ATCTGCTCCT	GCTTCTACAC	ACAGCCGCAC	CCCAATACCG	TCTACCAAGTA	180
CGGGGACATG	GAGGTGAAGC	AGCTGGACAA	GCGGGCCTCA	GGCCAGAGCT	TCGAGGTCAT	240
CCTCAAGTCC	CCTTCTGACC	TGTCCTCCAGA	GAGCCCTATG	CTCTCCTCCC	CACCCAAGAA	300
GAAGGACACC	TCCCTGGAGG	AGCTGCAAAA	GCGGCTGGAG	GCAGCCGAGG	AGCGGAGGAA	360
GACGCAGGAG	GCGCAGGTGC	TGAAGCAGCT	GCGGAGCGG	CGCGAGCACG	AGCGCGGGCT	420
CGAG						424

(2) INFORMATION FOR SEQ ID NO:1441:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 346 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

GAATTCGGCC	TTCATGGCCT	ATAGGCCATG	AAGGCCGGCC	TTCATGGCCT	AGTCAGGCTT	60
AAGTTTAATA	AATAGCAAAT	TGCATACAGA	TATTTACAAT	GATCGAAAGA	CAAACAGAGG	120
TCCTATCCGT	GCAGTCCCAA	CAATAAAGAC	AGGCATTGGC	ATAAAGTJTT	TATAAAATCT	180
TGGGTACAGC	TGTTCTGAAA	GTAAAGTTCA	CTTTCAATCC	TAAAAAAAGT	CCGCTATTCC	240
TCCCTGGCTG	CTCTGGACTG	TCCTCATCCT	CTTTAGCTGC	TGTTGCGCCT	TCCGCCACCG	300
ACGAGCTAAA	CTCAGGCTGC	AACAACAGCA	GCGGCAGCAT	CTCGAG		346

(2) INFORMATION FOR SEQ ID NO:1442:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 591 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

```

GAATTCGGCC TTCATGGCCT AGGCTTCCCT GTTCCCTCAG CCCCAGTCGA GAGGAAAGAG      60
AATCGGGCCA CTGCCAGAAA GAGAGTCAAG CAAACCTGGA AGGGCAAATC TGAGAGTGGG      120
AAGGCCAAAG GCCGAGGCCC AGATTAGTA TTTACTAGCA GCGCCTTCGG GTAGCAGGAT      180
GATTCCTTTT CCTGCCTGTC TGCTGCTGGC TCTCTTCCCT AAGGTACAGG TTGGCAGGAC      240
CACCTCCGCC TACTTCTCCA CCATCCCTAG CATGCCAGCC CGTTCCCAGA TCAACCTGCC      300
AGTGGAGTCA GGCAGTGAC TCCTGGAGCC AAGAGGGAAG GGCAGGGTAG AGAGGGTATG      360
TCCAGTAGCC TGGAGCTCCA TGGTGGCTTC ATGCCTCCCT TCTCCAGCT CAGGTGGCCC      420
TGAGGGCTCC CTCGGAACAG TGCCTCAAAT CTGACCCAA GGGCCAGCAT GGGGAAGAGA      480
TGGTTGCAGG CAAAATGCAC TTTATAGAGA TTTTCTATTG CTGGGAAGGT GTGTTTCTCC      540
CACAATTGTG TTGTGAATAT TCACTGTTT TATAAATGTC TGACCTGTCC G      591

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(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 526 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

```

GAATTCGGCC TTCATGGCCT AGATTGAATT ACCTGCCTCG AGCTCCTGTC CTTAGGTGAT      60
CTGCCCGCCT TGGCCTCCCA AAGTGCTGGG ATTATAGGAG TGAGCCACCT GGCCCAGCTA      120
GCTTTTAAAG TTCTGCCAGC ATAGCCCCGG GATGGGGTGG GGGTAGACAG GGCCTTAGGA      180
CTTTCATTTT TAAATGCTC ACTCCACAGT GAAGAAACAG GTGATGACTA TCCTGAATAT      240
TTGGGAAGCT GTGTCCTAGA ATTTTGGCC TCAGTTCCAG AACCACAGC TTCTTTACAA      300
CATGCTTCAA GCCTGGGACT GAGCTGCCAG TAAATAAACC CCTAGTAACC TTAATATGGG      360
TTAATAAGAT TAGGTGCCCG CTCTGCACGC TCCCCTGCCC CTCCTCGTCC GGGCACCTGT      420
TATGCTAGGC CAGCATGTTT GCAGCTTAGC CAGGGAAAAT CGTGGACCAA GACAGGGCTT      480
TTCATCCACG ACTGGCTAAA AAGATGGCTC TCAATAATAT CTCGAG      526

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(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

```

GATTGAATTC TAGACCTACC TCTCTTTTTT TGTGGTCTCT CTTTCACTCT CTGTTCACTT      60
CTCCGTGAGA TTTTCTGATT AGTAGTTACC TTCAGCATGC CAGTTGACTT GCAAACCTAC      120
AATCCAACCT TTCTTCTACT TTGTCATCTG ACAACAGCCT GGTGTTGATG TGATTCAGG      180
ACTTCTTCAC TTGGGTGGCC ACTCTCATTG CCACAGAGTT CACTAGTCAT GGTGAACACA      240
CCAGTCTTTT ACACCTCCCT CACTCCCAA CCACTCGAG      279

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(2) INFORMATION FOR SEQ ID NO:1445:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 644 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

```

GAATTCGGTC TTCATGGCCT AGGGGAAGAA AGGCACCTTT CTCACAGGCT GGTGAGAGAG      60
AGGAAGGGGG ACGGGGAAAG CCCTTTATAA AAGCATCAGA TCGGCTGGGC ACAGTGGCTC      120
ACGCGTGTA TCCAGCACT TTGGGAGGCC GAGGCGGGTG GATCGCGGGG TCGGGGGTTT      180
GAGGCCGGCC TGGCCAATAT GGTGAGACCC CGTCTCTGCT GAAGATACAA AAATGGCTG      240
GGCATGGTGG CGGGCACCTG TGGTCCCGGC TGCTTGGGAG GCTGAGGCGG GAGAATCGCT      300
TGAGCCCGGG AGGCAGAGGT TGCAGTGAGC TGAGATCGCG CTACTGCACT CCAGCCTGGG      360
CAACAGAGCG AGACTCCATC TCAAAAATAA AAGAAAGGCA TAAATATTAC ATTACCTCT      420
GAATACTGTG GTGTATACT TGAGTTTTTA TGTGTGTATA TATATGTGTA TAGGAGAGTA      480
AAAAATAAAT GAAATTAGGA TTTTGCAAGT TATAATCATA TAAAAATGAT TACCTAAAT      540
ATATCATTAG GATATTATGT TATTACATC TCTTATGCTA ATTCTAATT TCTTTTATTG      600
TAGTATAGTA GAATTGAGAT TTGNNATGG AATTGGTCCT CGAG                          644

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(2) INFORMATION FOR SEQ ID NO:1446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 756 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

```

GAATTCGGCC TTCATGGCCT ACCTCACCCG GCCCGGACAC GGACAGGATT GACAGATTGA      60
TAGCTCTTTC TCGATTCCGT GGGTGGTGGT GCATGGCCGT TCTTAGTTGG TGGAGCGATT      120
TGTCTGGTTA ATTCCGATAA CGAACGAGAC TCTGGCATGC TAACTAGTTA CGCGACCCCC      180
GAGCGGTCCG CGTCCCCCAA CTTCTTAGAG GGACAAGTGG CGTTCAGCCA CCCGAGATTG      240
AGCAATAACA GGTCTGTGAT GCCCTTAGAT GTCCGGGGCT GCACGCGCGC TACACTGACT      300
GGCTCAGCGT GTGCCTACCC TACGCCGCA GCGCGGGTA ACCCGTTGAA CCCATTCTG      360
GATGGGGATC GGGGACTGCA ATTATTCCCC ATGAACGAGG AATTCCCAGT AAGTGCGGGT      420
CATAAGCTTG CGTTGATTAA GTCCCTGCCC TTTGTACACA CCAACCCGTC ACTGACTTTT      480
ACCGCAGCTG GAACTGTGCT CCAGGGCCTT TCCATCTTTT CCCCCACACT CCCTTTGACC      540
CTGTGTTGCC CTCAGAGGCC AAATTCCTGG GCTCAGGGAC TGGCTTTCGG CCTATTGGTG      600
GTGGAGCTGG GGTCTGGCA AGGAATTTC GGCAGCGCTT GGAGGCAATG TTCCCCGAGA      660
GCAGTTCACG GTGGTGATGT TGACTTATGA GCGGGAGGAA GTGCTTATGA ACTCTTTAGA      720
GAGGCTGAAT GGCCTCCCTT ACCTGGAAC CTCGAG                          756

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(2) INFORMATION FOR SEQ ID NO:1447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGGTCACCTGG GATCATCTGA ACAGAAGTGC      60
ACAGGCTACT TGTACAGAGA AAAAATTAAT ACTCAAAGGA AATCTTCATT TTTTAGATTG      120
ACTTTGGGAA TTTGAATTTT CATCAGTGCA AATATAAATT TCTCTATCCT GCTCTGAGGC      180
TAATTGGTAC CATATTTTCC CTTTGTGTCT TGTGACTCTG CCACATCCCA TCTCATCCTG      240
GCCTCTGAGT CAAGAACCCA GTGAAGTAC TTTCTAGTTC TAGAAGTTCC GCTGCAAGGC      300
CAGGAAAGCT TGAGAAAGGT ATTGTGGAAG AAGCAAAGGT AGACCCCAT TCACTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:1448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

```

GAATTCGGCC TTCATGGCCT AGGGAAAATA AGTTAATTCT AAATCAAATC TAAATATTAT      60
ACCTCATGCT ATGGTTTTAT TTTATTTTCAG TGCTGCCGTT ACTTTTCCTC CCCAAAGCAA      120
TGTGTTTTCC AGCCACAACC CTCGAG      146

```

(2) INFORMATION FOR SEQ ID NO:1449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

```

GAATTCGGCC TTCATGGCCT ACTTTTCAAA AGCAGCTTTG CTCTACTGAT TTGGGTAAAA      60
GCTTAGTTGC AGTTGGNTTG GGAGGAAATG GGAGCAGAAA ATTTGAGAGA GTGAGTGTAG      120
ACAACTCTTT CAAGGAATTT CGCTATAAAT GGGAGTAGAG ATCTGAAGAC TGAATAATTA      180
GCAAACTGAA AAGTGGGAAG ACGTAATTCT CTTATTATTT CATTTTCTT AGTGAAATAA      240
GAGGTGAAGT TCTCTGAGTA ATAGGAGGGT CAAACAGGNG TTAGAAGTTC ACAAAGAAAG      300
GTCTCGAG      308

```

(2) INFORMATION FOR SEQ ID NO:1450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

```

GAATTCGGCC AAAGAGGCCT AGCATGTTGT GGCTGTTCCA ATCGCTCCTG TTTGTCTTCT      60
GCTTTGGCCC AGGGAATGTA GTTTCACAAA GCAGCTTAAC CCCATTGATG GTGAACGGGA      120
TTCTGGGGGA GTCAGTAAC CTTCCTTGG AGTTTCCTGC AGGAGAGAAG GTCAACTTCA      180
TCACTTGGCT TTTCAATGAA ACATCTCTTG CCTTCATAGT ACCCCATGAA ACCAAAAGTC      240
CAGAAATCCA CGTGACTAAT CCGAAACAGG GAAAGCGACT GAACTTCACC CAGTCCTACT      300

```

```

CCCTGCAACT CAGCAACCTG AAGATGGAAG ACACAGGCTC TTACAGAGCC CAGATATCCA 360
CAAAGACCTC TGCAAAGCTG TCCAGTTACA CTCTGAGGAT ATTAAGACAA CTGAGGAACA 420
TACAAGTTAC CAATCACAGT CAGCTATTTC AGAATATGAC CTGTGAGCTC CATCTGACTT 480
GCTCTGTGGA GGATGCAGAT GACAATGTCT CATTGAGATG GGAGGCCTTG GGAAACACAC 540
TCGAG 545

```

(2) INFORMATION FOR SEQ ID NO:1451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

```

GAATTCGGCC AAAGAGGCCT ACAGTAAGCA GATGAAGCTG CTGCTGTTT TCGAAGTGAG 60
GACTGAAGGG AACGAAACT GGGGTGGGTT TTTGCGCTTC AAAAAGGGGA AGCGATGTAG 120
CCTCGTTTTT GGACTGATAA TAATGACCTT GGTAATGGCT TCTTACATCC TTTCTGGGGC 180
CCACCAAGAG CTTCTGATCT CATCACCTTT CCATTACGGA GGCTTCCCCA GCAACCCAG 240
CTTGATGGAC AGCGAAAACC CAAGTGACAC AAAGGAGCAT CACCACCAAT CCTCTGTAAA 300
TAATATTTC TACATGAAGG GAACCCCTGA G 331

```

(2) INFORMATION FOR SEQ ID NO:1452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

```

GAATTCGGCC AAAGAGGGAA GGGAAAATTT CAAGTCAGAT AGAATTCTAT ATATACCAT 60
TCTTTGGAAC CTTAGCCCT CAAGATTCCA ACATCATGAC CTCAGTTTCA ACACAGTTGT 120
CCTTAGTCCT CATGTCACTG CTTTGGTGC TGCCTGTTGT GGAAGCAGTA GAAGCGTATA 180
TGCACGAAAA AGAAATGGAC AGATGTGACT TTGAAAGGCC TACTGAGTCA AACCTCACCC 240
TGAAAACCTT TGCAGCACTC GAG 263

```

(2) INFORMATION FOR SEQ ID NO:1453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 558 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

```

GAATTCGGCC AAAGAGGCCT AATTTTAAAG CCCTGCTAAC TTCAATGTCT AGGTCACCCA 60
TTGTGTTATT TTTATGGTCT TTTTCATCC TGATTTTGG TCATTGGTC CCGTCTTATG 120
GCATACCTGG TAATATTTTA TTGAATCCTT AGTACTGTAC ATGAAAAATT GTAGAGGCCC 180
CAGTAGTTTT CTTCTCTGA AGAGGAGTCA CCCTTCCTT CACTAGACAG TTATGTTGGG 240

```

```

GGTTATATAC CTTACTCCAA TCAAAGATTG AGCTGAGTCA GAACTCTAAG GGAGTTAAGT      300
TTTTGTGTCC TCTGGGGACC AGGGGTTCCA ACTAAGACTG TGATATTCAC CAGGATCCAA      360
TTTCCCAGTG CCTCTTGAAC TCTTATTCTT ATCTTTTAA CACATCAAGG CAGCTGTTT      420
GCATTTTCTT TTCTGTTTCT CTTTTTAGCT TCATCCTTTG CAGCTTTAGA AATTGACAGT      480
TGTCTTACAG GGAAAAGTAG CTGTGTAACA AGCTCATGTC TCTGCCTCTC TTCCACTGAT      540
ATCTTAGCCC CGCAGGAG

```

(2) INFORMATION FOR SEQ ID NO:1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

```

GAATTCGGCC AAAGAGGCCT ACCTAAACCG TCGATTGAAT TCTAGAAATA CAATGATTTT      60
AAAAAAGATT TCCAAAGGCT TTTTCTTTT TTCTTTTTC TNGAGACAGG GTCTCACTCT      120
GTCGCCCAGG CTGGAGTGCA GTGACACAAT CTCGGCTCAC GGCAAGCTCC GCACTGCCCC      180
CTCAGTTTCA CGCCATTCTT CCGCCTCAGC CTCCCGAGCA GCCGGGACCA CAGGCACGCG      240
CCACCACGCC CAGCCAACCT TTACATTTT AGTAGAGACG GGGCTTCACC ATGTTGGCCA      300
GGATGGTCTC GGTCTCTTCT GCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

```

GAATTCGGCC AAAGAGGCCT ACTTGATGTC TGTGACCCAC ACNTATTTCG CACTCCCTC      60
CCCTTTTGAA AATCCCTAAT AAAAAGTTGC TGGTTTTTGC GGCTAGTGGG GCATCATGGA      120
ACCTACTGAC ATGTGATGTC TCCCCGGAT GCCCGGCTT AAAATTTCTC TCTTTGTAC      180
TCTGTCCCTT AATTTCTCAA GCTGGCCGAT GCTTAGGGAA AATAGAAAAG AACCTAGGTG      240
AATATTGGGG CAGGCTCCCT GATGAAATGA TATATATTCT TAAATAAAC TTTTCATCTT      300
TGCATATACG TTTATATGCC GAGTTTTCTC CAACCTTGTC TTACAGCACT TTGTATACTA      360
CATTCTAGCC ATACTAACT CTTGCAGTTC CTGAGACATG TGCTGTATCC TATTCTTCT      420
GGTCCTTTTC TCATTGATTA ACTACCTGGA GCATCTTTT AATTCAGTGT CAGCGCTCGA      480
G

```

(2) INFORMATION FOR SEQ ID NO:1456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

```

GAATTCGGCC AAAGAGGCCT ACTTCACCTT CAAGTCCCCT TTCTCAAGAA TCCTCTGTTC      60
TTTGCCCTCT AAAGTCTTGG TACATCTAGG ACCCAGGCAT CTTGCTTTCC AGCCACAAAG      120
AGACAGATGA AGATGCAGAA AGGAAATGTT CTCCTTATGT TTGGTCTACT ATTGCATTTA      180
GAAGCTGCAA CAAATTCCAA TGAGACTAGC ACCTCTGCCA ACACTGGATC CAGTGTGATC      240
TCCAGTGGAG CCAGCACAGC CACCAACTCT GGGTCCAGTG TGACCTCCAG TGGGGTCAGC      300
ACAGCCACCA TCTCAGGGTC CAGCGTGACC TCCAATGGGG TCAGCATAGT CACCAACTCT      360
GAGTTCCATA CAACCTCCAG TGGGATCAGC ACG                                     393

```

(2) INFORMATION FOR SEQ ID NO:1457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

```

GAATTCGGCC AAAGAGGCCT AGTGTGTGTG TGTGTGTGTG TGTGTGTGTT TTATCTCCTT      60
CAACTCTGAC CACCTGGAAG TCAGCCTAAT CTCTGCCCTC GTGTTGATCT TTAATTC AAC      120
ATTTAATTAC CTATCTTGGT ATCCATATGA ATTTGATTGT TTTTGTGGCT TTTTGTGAAC      180
TCATAAAAGG TATCCAAGTT CCTGGAGGCG ATAGTGCCCA TCTCCTCCCA TCCACCAGTG      240
GACATTCTTT TCCAAAAGAC ACATGG                                     266

```

(2) INFORMATION FOR SEQ ID NO:1458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

```

GAATTCGGCC AAAGAGGCCT AGGTTGTAGT TACTTTCAGA GTAGATACAG GGTTT TAGAT      60
CATTACAGTT TAAGTTTCT GACCAATTAA AAAACATAG AGAACAAAAG CATATTTGAC      120
CAAGCAACAA GCTTATAATT AATTTTATT AGTTGATTGA TTAATGATGT ATTGCCTTTT      180
GCCCATATAT ACCCTGTGTA TCTATACTTG GAAGTGTTTA AGGTTGCCAT TGGTTGAAAA      240
CATAAGTGTC TCTGGCCATC AAAGTGATCT TGTTTACAGC AGTGCTCTCG AG          292

```

(2) INFORMATION FOR SEQ ID NO:1459:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

```

GAATTCGGCC AAAGAGGCCT AGTTTATGA GAGGGTTTCC ATTAAGAAGT TAATTGAAAT      60
TCTTTATTTA TGTAATAATGA AATTTCCAAT TAAATTATTT CACACAGCAT TTTTCCCTT      120
TAATTCATT AGTTTATTTA TTTCTTGCC GACCAGGCC AGGAGCTTAG GAAAATGAT      180

```

GAGGCCTCTT TTACGCTGTA GTCCTGCAAA TGCTGTGTTT TATTCCCCCT CCCCTGCTCA 240
GCACTCACCC ACGACTGACA CATGGGGTAC ACACACACAC ATACTCGAG 289

(2) INFORMATION FOR SEQ ID NO:1460:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC AAAGAGGCCT ACACCTGCGT TGGAAACATCT GATCCAGTGA TAGCAGTCA 60
CTAGGTGCCT TAATTAATAA AGCCAAAATA TCTTTCCACT AGCAAATAA TCGTATTAC 120
TTTACTCTC CCATTTTAA TTAATCTTC CTATTTCAT TCACCTCTC ATCTCTTCC 180
TCTATTGGAT TATCTCAGGT ATCTAATCCA ATTCACACT GTTTAATGAA TGTAATTGCA 240
ACCAGTCTGC AATTCCTAAG GTTTTGTTC TTTGCTTTT TCTTTGTAG TCCATCTCTT 300
TGCTACACTC AAGCAGGTCT AGAATTCGAG 330

(2) INFORMATION FOR SEQ ID NO:1461:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GAATTCGGCC AAAGAGGCCT AGGGACAGTG ATTATAGGAC TCCACACATG CAACTGAATC 60
TAGCATTACT GACTTTAAAT TTTTGAGCC TATCTAAAGG CCAGATGCTA TCAGCAGCTG 120
AACGGCATCT ACCAAAACCA GCTGCAAAGA TAGAAGCGGA ACAACTGGTT TGGTGGAGAG 180
ATTCGATAAC AACGAGTTGG GAAATAGGTA AAATAATAAC ATGGGGTAGA GGTTATGCTT 240
GTGTTTCTCC AGGCCAAAAC CAGCAGCTGA TTTGGATACC ATCAAGATAC CTGAAAACCT 300
ATCATCAGCC AGATGCCAAG GAAGAGATT TGGGAGGAAC CCGAGGACCC CATGTTATTA 360
TTTACCTAT TCCCCAACTC GAG 383

(2) INFORMATION FOR SEQ ID NO:1462:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GAATTCGGCC AAAGAGGCCT ACGATGACGT CACCGTCACC ACCGGCGTGA AGCGAGACAG 60
TGGTGAGGGC TTCTGGACTG GATGGAGGAC CTGAAGACAT GAGGTGGAGG CACAGGTAGA 120
AGAGAAGATT CTCACCATCG CTGATTCACA CAAAAGCATT TCTCCAAGTG GTTGACAGATG 180
ACATGATTTC CCAAAGTGTT AGAGCTGAAG TGTGTTTCCT TGTGTATATA TACTGTGGTT 240
CCTTTATCCC TTCATCTGTG GATAGACAGG TGCAACCGTG TGGTTCCCCA CGATATGATT 300

TCATTGTGGT TTTCTGTCTG AAGAGTATCC CAGTATGTAC CTGTGGAGCA GCTTCTTTAT 360
CCCTTCTTAC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:1463:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 174 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

GAATTTGGGC GGAGACACAA ATTCAAATCA TATCAACCTG GTAAAGAATT TGGATTTTAT 60
TTTGAGTGTG TTAGTGAGTA TTGCATGGCT TTGAGCAGAG AAAGGATGAT TTATATGTTT 120
AAAAGAGTGC TTTGCCTCTT ATATGTGGAA GAGATTGTAG GAGGAGGACT CGAG 174

(2) INFORMATION FOR SEQ ID NO:1464:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 122 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

GAATTCGGCC AAAGAGGCCT AGTTGCGGTT TAAATTTCCTA AATGTATGGC ATTTGCTTGT 60
TTTTTAAGTT GATTCTAGT TTTATCACAT TGTGGTCAGA GAATGCTGAG AAAGAGCTCG 120
AG 122

(2) INFORMATION FOR SEQ ID NO:1465:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 315 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

GAATTCGGCC AAAGAGGCCT ACTTGAGCTT TTTTCATGTG TATATATTTA TGCTTCTTTT 60
CTAAAAA TTAGATGGA AATTCACATA ACAGAATTAA CTAAAGCATA CATTTCATTG 120
GTATTTACTA CATTACAAT GTTGTCAT CATTACCTCT CTCCAGTCT AAACATTTCA 180
TCACCCCAA AGGAACCCCT AAGCGGTCAC TCCCCACTCC ACTGTCTCCC ACAGCCCCTG 240
GCAACCAGCA GTCTGCTTTG TGTCTCAATG GATTACCTA CTCTTGATAG CTCTACAAAT 300
GGAACAATAC TCGAG 315

(2) INFORMATION FOR SEQ ID NO:1466:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 175 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

GAATTCGGCC AAAGAGGCCT AGGTAAGAGA AACGACCAAT TCTACCAGTT ATTCTACAAT	60
GTGGGTTTTC ACTGCTCTGT TCACATGCCT TATTCAGACT TCTTGTGGTG GTCAATTGCT	120
AGATGGTCTG TTGAATTAT CTGCTGTCAT ACATCCAAAA AGGTCTCACA GAGAG	175

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 350 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GAATTCGGCC AAAGAGGCCT AGAAGGACAC CTCCATCCAT TCCACGCAGT TGCTCAAAGC	60
AGAAATTTTC AGTGCAAGTC TTGATGCTGC GCCGTCCCCC ACTCCCTACA TCAGAACGCA	120
TCCCTCATCT GGACTCCAGC GGTGGCTTCT TGATGCTGCG CGGTCCCCCA CTCCTACAT	180
CAGAAATGCAT CCCGCATCCA GACTCCAGCG GTGGTGCTCT ACCTGCACGC TGTTGCCAAG	240
TCCAAGCTAC CATACTCCTG CCTGAGCTAT GACAACAGCC TCCTCACTGA TCTCCCCTTT	300
CTTCCCTTTG CCTCCTCCAG CTCATTTTTC ACAGTGTAGA ATGACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 419 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCGGCC AAAGAGGCCT ACTATACTAA AATTCTGTGC AAAAAGATGC TTGAAATTAT	60
TGTAGAGACT GAATCTTTGC TGCTTGTTAT AAATATTGCA GGGCATAAAC CTTCATTCA	120
TAGGTTTCATC AGCTTTTATG ATTGGGAGTG ACAGGGAGGC AGCATTGCAG TCCTTAGTCC	180
TAGGTGTGGT CTAGAATTTA CCCTGTATTT AAGTCACTTT GGAATAGAAG TTTTTTTTCT	240
CGGACAGGAT ACACTATATA TTTTAAATC TCCTCCATA GTCGTAGTGC AGAGATATAA	300
ATAGAAGTAC AGGTAAGAGA TGTCTTCTGC CTTTCAAACC CTTCTAAGT TTGTGTGCTG	360
CTTTAACTTT ATTCACATAG AGCAGTCTGT TTTATTACTC AGGATATGGG CCACTCGAG	419

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 612 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

```

GAATTCGGCC AAAGAGCGAT GGGGACAAAG GCGCAAGTCG AGAGGAAACT GTTGTGCCTC      60
TTCATATTGG CGATCCTGTT GTGCTCCCTG GCATTGGGCA GTGTTACAGT GCÄCTCTTCT      120
GAACCTGAAG TCAGAATTCC TGAGAATAAT CCTGTGAAGT TGTCTGTGCG CTACTCGGGC      180
TTTTCTTCTC CCCGTGTGGA GTGGAAGTTT GACCAAGGAG ACACCACCAG ACTCGTTTGC      240
TATAATAACA AGATCACAGC TTCCTATGAG GACCGGGTGA CCTTCTTGCC AACTGGTATC      300
ACCTTCAAGT CCGTGACACG GGAAGACACT GGGACATACA CTGTATGGT CTCTGAGGAA      360
GGCGGCAACA GCTATGGGGA GGTCAAGGTC AAGCTCATCG TGCTTGTGCC TCCATCCAAG      420
CCTACAGTTA ACATCCCCTC CTCTGCCACC ATTGGGAACC GGGCAGTGCT GACATGCTCA      480
GAACAAGATG GTTCCCCACC TTCTGAATAC ACCTGGTTCA AAGATGGGAT AGTGATGCCT      540
ACGAATCCCA AAAGCACCCG TGCCTTCAGC AACTCTTCCT ATGTCCTGAA TCCACAACA      600
GGCGCACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

```

GAAAAGCCAA GACTTTAACT TTCATTACAT ATCTAATAGT TGATATCACC AGTTACCATT      60
TTGAATTTTG TATAGTACTA GGTAGAACA TTGCTTAATC CTTTTAAAAA AAATGCATTT      120
ACGTAGAACT CGAGCAGGAT GTTGGCCCC GATGTTTTT TTTCATACTC TTCTGTCGCC      180
TCCTCCCATT TCTGCACAGT TCTACCCAC TACTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

```

GAATTCGGCC AAAGAGGCCT AGGGCATCAT GCAGACACAT CTGTTAAAGC AGGAAAAAAA      60
AAACCATGTG GAAGATTAAG CTAGGCAGAG TGCCTGAAAA GCCCTCTGCA ATAAGTTGAG      120
CTGGAAAAAC CTCCATATCT AAAGATGCTT TAATCATCTC AAGAACACCA ACAACATTTT      180
CTATTATAAT ATAACTATGA TAGATGTGAA TCTACCTCTT GGATTAAGGC AATAATTTTA      240
TAGCTATCAA ATTTTCACAG ACACCATTTT CACTACTCTG AGTTGCATCT CTAACAAGCT      300
TCTTTAGCCT CTGCCTACAG ATTTCACTGA CAAAGCCATT CAGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCGGCC	AAAGAGGCCT	ACAACAAACC	ATTCTTCAGC	ACCTTTGCAA	AAACATCTAT	60
GTTTGTTTTG	TACCTTTTGG	GCTTTATTAT	TTGGAAGCCA	TGGAGACAAC	AGTGTAACAAG	120
AGGACTTCGC	GGAAAGCATG	CTGCTTTTTT	TGCAGATGCT	GAAGGTACT	TTGCTGCTTG	180
CACAACAGAT	ACAACTATGA	ATAGTTCCTT	GAGTGAACCT	CTGTATGTGC	CTGTGAAATT	240
CCATGATCTT	CCAAGTAAA	AACCTGAGAG	CACAAACATT	GATACTGAAA	AAACCCCGC	300
GGTACTCGAG						310

(2) INFORMATION FOR SEQ ID NO:1473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

GAATTCGGCC	TTCATGGCCT	ACAACTTTAA	GATTAGCTAC	TTTGAATAAT	CTCAGTAGGT	60
TCTGGGGCAC	AGGAGCTGCC	CCTCTTGCTC	TGAGATTGG	CCATGGGGTG	ATTAGGACAG	120
GTATAGTGGC	ACAGAGTGTA	AAAACCCCAT	AATGGTGTGG	ATTCTGGATT	GCTTAGTTTG	180
CATTTGACAA	GTGCATGCCT	GGGAGGAGGA	CTCCTCTTAG	TAAAGAGGAT	GGGAGGCAAG	240
AAGAGAGGCC	AGAGGCCAAG	ACAAGGTAAC	TTAGGCATAG	CATCAGGTTG	TCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:1474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

GAATTCGGCC	TTCATGGCCT	AAAAAAGTAT	GCAACACTCA	GTTTATTTAA	TACTTACAAG	60
GGGAAATCAT	TAGAAACACA	GAAAACCACA	GTTGCAGCTC	GACATGGATT	ACAGAGTCTT	120
GGAAAAGTCG	GTATTTACAG	GCGTATGCCT	CCACCTGCTA	ACCTCCCAAG	TCTTAAAGCA	180
GAAAAACAAAG	GCAATGATCC	TAATGTAAAC	ATTGTACCTA	AAGATGGCAC	AGGGTGGGCA	240
TCAAACAAAG	AGTAACATGA	AGAAGAAAAA	ACACCAGAAG	TGCCACCAGC	ACAGCCAAAA	300
CCTGGGGTTG	CAGCTCCCCC	AGAAGTAGCA	CCTGCTCCCA	AATCATGGGC	CAGTAACAAG	360
CAAGGTGGGC	AAGGAGATGG	AATCCAAGTG	AATAGTCAGT	TTCAGCAAGA	ATTTCCAGC	420
CTGCAGGCAG	CTGGGGATCA	GGAAAAAAA	GAAAAGGAAA	CAAATGATGA	CAACTATGGA	480
CCTGGACCCA	GTTTACGTCC	ACCACTCGAG				510

(2) INFORMATION FOR SEQ ID NO:1475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

GAATTCGGCC	TTCATGGCCT	AATCCATTCA	TTTGATGGAC	ATTTTCTAAG	TACCTGTGAG	60
CCAGGTGCTG	CCATTTCAAA	GTCTCTTCTT	ACCACGCTCC	TCAGTGGCTA	GACATTTTCA	120
CGTGGCCAGA	AAGTCCCGAC	TCTTGCTGGG	CGTCCCTGGA	CAAGTTGCCT	TCCTCCTCTG	180
AGCTTGGCGC	TCCCCATCTG	TATAGTGGAG	ACCCTTGGCC	CCCCTCTGTA	CGGAAGGGCC	240
GATGCGAAGC	TGCAGTTAAA	AAAGGCTCAC	ATGCTCCTAG	CCTTGTGCAG	TCAGGAGGGG	300
AGACCAGGAC	AGTTGGAAAT	TATGATTGCA	AATGGCTTTG	CATTTTAGAT	CATTGCTGTG	360
TGTGGATCAG	AGAAACGCAC	AAGTTCCCTG	GCATCTCGAG			400

(2) INFORMATION FOR SEQ ID NO:1476:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

GAATTCGGCC	TTCATGGCCT	ACCACATTTT	GTCAGCAGAG	AGCCTTTTAA	ACTTGGATTG	60
CAACTTCCTG	TTGTCTAAAC	GGAACCTTCC	GAACGTAGGA	CTTATAGGGG	AAGCTGTGTT	120
GCATGTCAAA	AAAACACTA	ATCAGAATGA	GCCTTGTCAT	CCAGAGCCAG	AACGTGCTGA	180
GAAATTTTGA	TAATTTTGCA	ACTTCTTTTT	TTACAAGGAA	CTTTTGTGCT	ACTACACATC	240
AGGACTTTTG	AAGCATCCAA	TAAATCCATT	TAATAAGTAT	GAGCATGTGT	CTGAGTGGAC	300
AAGAAAGTGA	AACCATCCAT	GCTACATTGG	ATAATTTTTC	CTCCCCCAGA	CTGGACAGGG	360
AATCTCAGCT	TTCAAAACAG	AGTAACCTGG	CTCCAATTAC	AAAGCTGCAC	AGGCATTAAA	420
GATCGTGCTG	CCTTTGTTAG	GCAGATTGG	AGGGGAGAGC	TCGAG		465

(2) INFORMATION FOR SEQ ID NO:1477:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

GAATTCGGCC	AAAGAGGCCT	ACATGTAGCT	ATCCTAAGAC	GTATTTTATT	TTGAGCCACT	60
TTCTCAGAGG	GAATTGGGTG	GGTGTGGTCG	TAAGAACACC	TAGAAAATAG	GGGTGAAACC	120
TTTATGGGGC	CAGGGGAGCC	ATGGCAGAGG	GTGGAGTGGG	GGATAGAAGC	CTTCAGACTC	180
CTCCGCCCCA	GCCACTCTGC	ACCTGGGGCC	TTTCAGCTGT	TAAAATGAAA	AGCCAATTAT	240
CTTCTGTAAA	TGAGGGAAAA	AAAGAAGGAA	TAAAAGTGTC	TATTATGTAT	GCTGATATGC	300
ATAACACTTC	AAATAAAAGG	ATATATAAGC	ACTTGACAAA	TTGAGGGAGA	AGGAGGGGAG	360
AGTGCTGGGC	GCTCGAG					377

(2) INFORMATION FOR SEQ ID NO:1478:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

GAATTCGGCC	AAAGAGGCCT	AGAGATTCAG	TTTATTCTAT	ACTCAGACTT	TGGTATCCCC	60
TTAGATGCCC	ATGTCAAAAA	TGAGAAAGTT	GGTGACATGG	TATGGCATT	TATTGCTTTT	120
TGTTTGTTT	CCATTGCTAC	TTTCACTCAA	ATTCCAAGGA	AATCACAGAA	GAAGGGCTTT	180
TGGTGACCTA	AAAGTAGAAA	TGAAAGCAAC	AAAATGCATT	CTGTCCAGCA	GTACACTGAA	240
GACAAAAAAT	GTAGTTGAAA	AGTCTCAGGG	AGCGCTCGAG			280

(2) INFORMATION FOR SEQ ID NO:1479:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

GAATTCGGCC	AAAGAGGCCT	AATTGCTTT	GCCAGTAGT	TGAAAGTGA	ACTCGACTCG	60
TGATGGTTCT	CCTGTCACTT	TGGTTGATAG	CAGCGCTCT	GGTAGAGGTT	AGGACTTCAG	120
CTGATGGACA	AGCTGGTAAT	GAAGAAATGG	TGCAATAGA	TTACCAATA	AAGAGATATA	180
GAGAGTATGA	GCTGGTGACT	CCAGTCAGCA	CAATCTAGA	AGGACGCTAT	CTCTCCCAT	240
CTCTTCTGC	GAGTCACAAA	AAGAGGTCAG	CGAGGGACGT	GTCTTCCAAC	CCTGAGCAGT	300
TGTTCTTTAA	CATCACGGCA	TTTGAAAAG	ATTTTCATCT	GCGACTAAAG	CCCAACACTC	360
AACTAGTAGC	TCCTGGGGCT	GTTGTGGAGT	GGCATGAGAC	ATCTCTGGTG	CCTGGGAATA	420
TAACCGATCC	CATTAACAAC	CATCAACCAG	GAAGTGCTAC	GTATAGAATC	CGGAAAACAG	480
AGCCACTCGA	G					491

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

GAATTCGGCC	AAAGAGGCCT	AATTCATTCA	GTCGTCATGA	GTGAGTGCT	TACTACATGC	60
AAGGCACTCT	GCTAGTTATA	TTCTAATAAT	GCAGAGATAA	TTAGACATGG	TTCCCGCCCT	120
CAAGAAGCTC	ACAAAAGTAT	TCAGGAAATA	ATGCAGACTA	GTGATTTTGC	TATAAAATTA	180
TTTTTGAAGG	AAGCAGACAC	AGCAGTATTT	ACCTGTAGGT	GGAGCAAGTA	ATAAGCCATG	240
CTGTGCAATA	TATACATAAA	GCTTCTGCTT	CTCATGGGAA	TTAGTTACA	GTGCTTGGAA	300
TGAGAAGGGG	AAGGAAAGAA	TTAACAAATG	CCAAGATTTC	TGGAGCAGAT	TGTACAGCTG	360
TGACTTTTGA	AAACAGAAAG	TAAGACCCTC	AGAAAACCAA	TGAAGTCTAA	GAGAAATAAA	420
ATTTAGTGGA	CAGGTATGAA	AAGTGTAATT	GCGCCTAACT	ACCAGATGGA	GACCTTCAGA	480
ATGGGCTATC	CTTAGAGTCT	AGTACATCAA	GAGACCCCTC	GAG		523

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

GAATTCGGCC AAAGAGGCCT AAAAAAAAAA AAAAAAGAAG ATATAAGCTA CTAGTATCAA	60
AAATGAAAGA GGGGCTGTTT CTA CTGATCC TGCAGACACT CGAG	104

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 337 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

GAATTCGGCC AAAGAGGCCT AAAGTGAAGT AAGAGATGCA CCTGAGAAAA CCTTGGCTTG	60
CATGGGTTTG GCAATACATC AGGTGTTAAC TAAGGACCTT GAAAGGCATG CAGCTGAGTT	120
ACAAGCCCAG GAAGGATTGT CTAATGATGG AGAAACAATG GTAAATGTGC CACATATTCA	180
TGCAAGGTGA GGAATTTGAT GTATTAAAGT ATTACTTAGA ATGGGACATT GAAGGCCATT	240
TAAGAATGAA NACGCTCATT TTATAAAAT GAGGAAATCA GTAAAAAGGA CATGAGTTCC	300
TTGCCATCTC ATTGATCATC AACTGAACA ACTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 168 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

CGATTGAATT CTAGACCTGC CTCGAGAGCG CGCTGTTGAA TACCCAGTAT GATGGTCCTT	60
AGCCTTCTTA GACCTTTCCT GTACCACTAC CTCTATGCCT TTTGCCAAGT CCAAGTGTTT	120
ACCAGAAATG GAACTGATGC CAGAAAGACT ACAGCAACAA TACTCGAG	168

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 478 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

GAATTCGGCC AAAGAGGCCT AGCAACCGCG CCTGGCTGCC TTTTCATTTT TAAAAACGTC	60
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AGTGTGCGCTC CCACACAACA TGCAAACCCT CCTGCCGAGC TGCGACCTTC GCCTGTCACG 120
GAACCTGGTG CTGAGTGTGG TGAGAGTGAA TCCTGCAGCA CGTGGCGCAC TGTCGGCCTC 180
TTTCATGTTT AGCTTTTGAT TGTGCTTATT GTCCATTGT ATTCTTCTT CTAAGTGTCT 240
GTTCAAGACT TTTCCGTCTT GGCTGGAGGT GGGAGGTGCC TGCTCCTGTG TTTTCTGGCA 300
TCTTTCTCTG CTGTCTTTGT GTGTCTGCAC TCAGGGAGTT TCCCTGGGGT GTGTGCCTAG 360
AGAGGTGCTG GTGTACATT TCAACGTAGG GACAGATTCC CAGCGTGTCT TTAAGGAGC 420
TGTGCCGCTG TGTGCTCACT TGAATCGCCG GCGTTCTTGT TTCTCCAGGC CTCTCGAG 478

```

(2) INFORMATION FOR SEQ ID NO:1485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

```

GAATTCGGCC AAAGAGGCCT ACACACTGCA AGAACAGAGC CAAGAACCTA CCATGTACCC 60
TTTACTTGGA TTTATCATT CTGTTTGGCA CATTGTCTTT ATCATTCTTG TTATATTTAC 120
ATATAGTTCC TTCCCCTTGG ATTATTGAG AACAACTGC AGAACTCACA CCTCTTTCCC 180
CGAAGAACTA GGCATTAGCA CATTACAAGA ATACGATGAT AGAGATCAGA AGTTAAATGC 240
TGATGAGATA TTCCTGTCTA ATCCACGAAC CTTATTTTCT TGTCTCATG TGTCCCAACA 300
GCTCGAG 307

```

(2) INFORMATION FOR SEQ ID NO:1486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 579 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

```

GAATTCGGCC AAAGATTGCT GTCCTTCAAC GTGTTTCTTA TGAAGTTATT AGTAATACTT 60
TTGTTTTCTG GACTTATAAC TGGTTTTAGA AGTGACTCTT CCTCTAGTTT GCCACCTAAG 120
TTACTACTAG TATCCTTTGA TGGCTTCAGA GCTGATTATC TGAAGAACTA TGAATTTCTT 180
CATCTCCAGA ATTTTATCAA AGAAGGTGTT TTGGTAGAGC ATGTTAAAAA TGTTTTTATC 240
ACAAAAACAT TTCCAAACCA CTACAGTATT GTGACAGGCT TGTATGAAGA AAGCCATGGC 300
ATTGTGGCTA ATTCCATGTA TGATGCAGTC ACAAAGAAAC ACTTTTCTGA CTCTAATGAC 360
AAGGATCCTT TTTGGTGGAA TGAGGCAGTA CCTATTGTTG TGACCAATCA GCTTCAGGAA 420
AACAGATCAA GTGCTGCTGC TATGTGGCCT GGTACTGATG TACCCATTCA GGATACCATC 480
TCTTCCTATT TTATGAATTA CAACTCCTCA GTGTCATTG AGGAAAGACT AAATAATATT 540
ACTATGTGGC TAAACAATTC GAACCCACCA GTCCTCGAG 579

```

(2) INFORMATION FOR SEQ ID NO:1487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

GAATTCGGCC	AAAGAGGCCT	AGATTGAATT	CTAGACCTGC	CTCGAGAGTC	ACGCTTAGTT	60
TGCCATTGTG	CCAGCTAGTG	ATATTGCTGA	TGTTTTTTGT	GGGTGTTCTT	TTAGCAAAAC	120
GTGAATGAAT	GCATGTTTAC	AGGGATGCTC	TGGACTGGAG	GATGGTGAAA	TCCATCGTGG	180
TTGTCCCTCT	CCCTGAATGT	CCTTTTGTAG	CCAGGGCATC	TTTCCAATAT	GAATTATTAA	240
GCCTTAACTT	ACATTTTTCG	ATAACTTATA	ACTCTCCATT	ATATATTTGG	TTACATTTCT	300
TAGATGTTTT	CAACATTCTT	TATTAAAGTT	ATTTTATCAG	CATCCGCTCG	AG	352

(2) INFORMATION FOR SEQ ID NO:1488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

GAATTCGGCC	AAAGAGGCCT	ACAAATGGGC	AGAAGTGAAA	CAGTCTTGTC	AGATACCTGT	60
TTTTTAAAC	TCCATTTTAG	AAAAGGAATT	AACTAGGACT	TTATATCTCT	TCGTTCAATA	120
TAATTTTAA	GAAGAATTGT	TGAAAAGTAG	ATATGTTTTG	CCATTTGCTG	AGAATATTTT	180
GTACGTTAGC	TTGTCTCTTA	CAAAAACATA	ATGTGTTTCT	ACTTCTGATA	ATGTATGTCA	240
ATTTAAATTT	TGGAATGGCC	AAGATAAGTT	GCTCTGCATC	TGTCCTTCAT	ATGGCTCCTG	300
AGCACAGCTC	AGTGACTGGC	CCTTGCACTG	CTTCTACCGT	TGTAATGGGT	AAAACCAGGG	360
GAAACTGCCT	TGCTCTTGAG	CTTGAGCAGG	TTAATCAAAA	GGATAGAGCT	TCCACTCTCG	420
AG						422

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

GAATTCGGCC	AAAGAGGCCT	AGAGAAAGAG	AGAAAGAAAG	GAGGGAAGGA	AAGGAAGGAA	60
GGAAGGAAAG	AAGGAAGAG	GGAAAGAGAG	GAGACTGAAG	GGCCAAGGAG	GGCATACAAT	120
GGAAGATGAG	AGCTGTGCTC	CCGGGAGGCT	TGTACTCATC	AAGAAAGAAA	GGAGAAAGAG	180
GGGGAAGAAA	AGAAAAAATA	AGAATAAAGA	AAGGAGAGAT	GAAGGAATAA	AGGAAAAAATA	240
GTAGAAAGGA	AAGAAGGAGA	AGGGAGAGAA	GAAAGTAGGA	AGGAGAACTC	GAG	293

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

GAATTCGGCC	AAAGAGGCCT	AGTGCAACTA	CAGATAAGTA	AACTTCGACT	GGGTTTAGTA	60
ACACCTGTCT	TTAATATTTG	TCAGTGTACC	TACATTGATA	ACATTGACCT	TTGGAAAAAT	120
TGGACTTGTA	TTGTGTTATT	TCTCTAGCAT	ATTAGTCCTA	AAAAAGTGTG	AGTAATAGGA	180
GATGGAGAGG	TGTTTGTGGA	TTGTCATTCT	GTGGTTCCTA	CAGCATTCAA	GTTGCGTCCG	240
TACGCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:1491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

GAATTCGGCC	TTCATGGCCT	AATTCTTAGA	AATAAAGCCA	CTATCATGCA	GGTTATTTAC	60
AAGTAAAAAC	ATGGAGTCAG	CCCACTAGAG	AAACGTTCAA	ATAGTGTGGC	TCCTGCTCTG	120
CCACGTTCTG	TTTATGACTT	TGGATATTTT	ATTTATCCTT	TCTGGGGTAG	TTTTTCAACT	180
TTAAGGTCCT	AATAAACTTT	TAGATTTTAT	GACCTGTCTT	CTTTAGCCCT	GTAAGATTTA	240
AATATTATAA	AGAACCCTGAT	TTCAAAGACA	CTGGTAAACT	TGGACAACTA	AACAAGTCCA	300
AGTATGGTAC	TTATTTGTGT	GTGTGCATAT	ATTAACCTTA	TGCATATGCT	GTTTTCACAC	360
CTATTTAAAC	TGTTTTTGAA	AAACGTATAT	ATCAGTTTTT	GGAAAACAGA	AGAAGATTTT	420
AAACGGCTAC	TCGAG					435

(2) INFORMATION FOR SEQ ID NO:1492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

GCGATTGAAT	ACATGTTCAA	TAAGGACAAT	GGACAGGCAC	CTTTTACCAT	CACTCCTGTG	60
TTTTCAGATT	TTCCAGTCCA	TGGGATGGAG	CCCATGAACA	ATGCCACCAA	AGGCTGTGAC	120
GAGTCTGTGG	ATGAGGTCAC	AGCACCATGT	AGCTGCCAAG	ACTGCTCTAT	TGTCTGTGGC	180
CCCAAGCCCC	AGCCCCCACC	TCCTCTGCT	CCCTGGACGA	TCCTTGGCTT	GGACGCCATG	240
TATGTCATCA	TGTGGATCAC	CTACATGGCG	TTTTTGCTTG	TGTTTTTTGG	AGCATTTTTT	300
GCAGTGTGGT	GCTACAGAAA	ACGGTATTTT	GTCTCCGAGT	ACACTCCCAT	CGATCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:1493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 271 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```

GAATTCGGCC TTCATGGCCT AAGCAGACAA TATAGTAGTA ATTTAAATTT TTGTTTCCTG      60
ACTTTCTGTA GTCCTTAAAC AAACAACAAA AAATCCTAGT AATCTTAAAC TTTTACATTA      120
ATAGAGATCC AAGAGAAAAT AAGCCATTTT TCACCATTTG GGACCCAAAT AAATCATAGA      180
CATGGTATTA AGAAGCCCTT TTCAGTCTGG TTGCAGTATT ATTTTCCTAC CTTCCTTTTT      240
CCTGTTCCCT GCTGTATGCC CACAGCTCGA G                                     271

```

(2) INFORMATION FOR SEQ ID NO:1494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

```

GAATTCGGCC TTCATGGCCT AATGGGTCAG AAATTTGGGC CTGGCTAAGT GGATCCTCCA      60
CCCCAGGGTC TCTCACAAGG CTGCAATCAA AGGGCTGACT AGGACTTGGA ATCTCATTTG      120
AAAGTTAGAT TGGGGAAGGA TCTGCTTCCA AGCTCACTCA GTAGTTACTG GCAGGATTAG      180
GTTTCTCCAA GGTGCTTGGA CTAAGGGTCT CAGTTCCTCA CTGACAGTTG GCCTGAGGCT      240
GCCTTCAGTT TCTTGCCATG TGGGCCTCCC CAGCATAACT GTTTACTTCA TCAAAACAAA      300
CAAACCTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:1495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 138 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

```

GAATTCGGCC AAAGAGGCCT ACGTCGATTG AATTCTAGAC CTGCCTCAGC TCTAATTATG      60
GTTTCATGTTA GATTGTCTGC CCTTCCTCTT CCTCTTCTCT TTTGGGGAAA GATAATAGCA      120
CTTAATAACG CCCTCGAG                                     138

```

(2) INFORMATION FOR SEQ ID NO:1496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

```

GAATTCGGCC AAAGAGGCCT ACAAATTGT TCCTTTTACG TACGACAGAC TTCTGAAATG      60
GTAGTAGTAG TAGTGCCCTT TTTTCTCTC TTTTGTAGCC AG                                     102

```

(2) INFORMATION FOR SEQ ID NO:1497:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 483 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

```
GAATTCGGCC AAAGAGGCCT ATTTGTTTCT TTGTACTGCC TAACTTTAGA AAGACCTGNA      60
ANCGGTANCA TGAAAACATT TTTAGAGAGA ATTACCAGGC ATTTTGGTA GAATGAGTGT      120
TTAATGGAAC AGTCCAGAGA ACTCATCAA GATGTTTATT AAAACGCGCA GACCTGCTCC      180
AATTAAGGGC CCAGTCAGTG GTGTTAACAG TGAAGGGACT GTTCCAGAGG CGTGCATCAC      240
GGGACGCCCC CCCCAAATAC AAATGGTTTG CCAGTAGCTC ACAAATGAAC CCCATTGCCT      300
TGCACTTAAG CTTCTGAAG CACATACATA TCCTGCTTTG TGCTTTCCGC CCTATAGTAA      360
ACGCAAACCA ATGGAGATGT GAAGCAATCT AATAGCAACA AGGCAAACCT CTACTTCCTC      420
TAAAGAGGAT TGCATCCTCT TGCTATCTTT GCCGATGCTC TCCTACAGAC CCATCCGCTC      480
GAG                                                                                   483
```

(2) INFORMATION FOR SEQ ID NO:1498:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

```
GAATTCGGCC AAAGAGGCCT AAAATTTCAG TAGGCTATAG AGTTTCCAT GAGAGTGTGT      60
GTGTGTGTGT GTGTGTGTGT GTGTAAAGAA CTCTTACATT TCACTGAGAA AATATTTTCA      120
TTGAAAGGAA ACACAGAACT CGAG                                                                                   144
```

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

```
GAATTCGGCC AAAGAGGCCT AAAATAACTG TCCAATTAAC TGAACACTGA GGTAGCTGGG      60
TACAGACTTT AGCGGCTACA TTTGACAAAC ATTGCAATTA CAAGCAGCAA CACAAACCAA      120
CCTTGGGATG GGGATAGAAA TCTTTTCNTT CTTCTTCTT GGGGGTTTGA GACAGAGTCT      180
CGCTCTGTCA CCCAGGCCGG AGTGCACTGG CGCAATCTCC GCTCACTGCA AACTCCACCT      240
CCTGGGTTCA AGTGATCCTC CTGCCTCAGC CTCCCAAGTA GCTTGGATTA TGGGTGCCCA      300
CCACCATGCC TGGCTAATTT TGTATGTTT GATAGAAACG GTGTTTCACC CTGTTGACCA      360
GGCTGGCCTT GAGCTCCTGA CTTCAAGTGA TCCACCTGCC TCAGCCCCC GACTCGAG      418
```

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 337 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTCGGCC AAAGAGGCCT ACAAAGACCA AGGTATCACA TTCTGCCATT AGCTGCTACC	60
TCTCCCTTCC CCATTTTCAG ACAGATTGAG CCCACTTTTT GTGTCCTCCT CTGCTCTTAA	120
GCTGTTTCTC ATCGTGGGTG CTCAGCAACT TGTCTGCTCT CACTCTAGTT TCTATTTGCT	180
TCCCTGAAAT TAGCCTTTAA CTATGCCAG ACAAGCCAGA GCCTTGCCCTA AACTTCTAAT	240
TCCTCTGTGC TTCTTAGTGT ATCCTTTCTG CCTGCTTGCC TGCCTGCCTT CCTGCCTGCT	300
TGCCTGCCTT ACTGACCCTT TGCCCCACGC TCTCGAG	337

(2) INFORMATION FOR SEQ ID NO:1501:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 105 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1501:

GAATTCGGCC AAAGAGGCCT AAACCGTCGA TTGAATTCTA GACCAGCCTC ATCTCCTGTT	60
CCTCTCTCCC TCCCAACTAT GTTGGCCTCC CTGCTGCTCC TCGAG	105

(2) INFORMATION FOR SEQ ID NO:1502:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 701 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1502:

GAATTCGGCC AAAGAGGCCT ACTGTGAACC TAAAACTCCT ATAAAGAAAA GTAAAGTCTT	60
AAAAACAAAC AAATACACAG CAACAATCTT ATTTTCCCCA GCCTGTCTTA TGTTAGGGTG	120
CAGATGTGAT TTCTGTGTGG CTAATCAGAT GCCCTTGTGT GAGAGACTGA TTTGAACAGA	180
GGCAGGGGCA TCCATCTTTC TAGTGTCACT CACAGCAGAA GCAGTGAGGT CCTGGTGTCT	240
GTCGCTGCAG TGGTGGCTTT TGATACAGGA GTTCCCTGAT GGCAGTAGCT TCTTGTGGG	300
TTCAGTTCTG TTGTGTGGTT CTGCAAGTTC AGCTTAGAGT CTGTTTCTTC AGCTGTTTCA	360
ATGACCCTCT GAGCTGTCTA CCATGAAAAA TTCTATCCTG CTTACACTAA TTAGAGCCAA	420
TCCTGTTATT TACAAATGAA TATCCTGACC AGTAATGAAG GTCTAGACTT AACTGTAATA	480
TTTTATGACT TAAATTGTTG GCATATGTGA AAACCTTTTG TTTATTCTAA ACTTTTTGT	540
TGTTGTTGTA AAATAAAACA TTTATGAAAA GCGCACCAAA AAGGATAACA AATGAGAGTA	600
ATGCAACATA CAGGCACCAG CAACTCAGGC CAGGGAGATG ATATATGAGC ATCCCAATC	660
TCCCCTTTAC ACTCCCTCAA ATAACCTCAAT CAAGACTCGA G	701

(2) INFORMATION FOR SEQ ID NO:1503:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1503:

GAATTCGGCC TTCATGGCCT AGGAACTAGG TGACTTTGGG GTCATCTCA CAAGTTTCCT	60
TACACTTAGG GATCAGTCTT TTGCTTCCTG TTGTCCTCTG CCTGAAAGTA GTTGCCAAGT	120
TGTACTGTTT TATATATCCA CCACAGCATG AGTTAAACCA AAGTCTGGAT CAGCAGACTG	180
CCAGATTTTT TTTTAACAAA TTTATTAATC AATACATTTT GTCCATGTCT ACAGTTGTTT	240
ATGGGGGAGA ACTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1504:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 277 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1504:

GAATTCGGCC TTCATGGCCT AGGGGACCTT GGGAGAATGT AATCCCTGCC CCTAGTCTCA	60
GTTTCTGCAT CCACGGAAGA GGGGTGAAGA TGGTCCCTAC CCCTCCAGAA TGTTCTTTTT	120
TTTTTTTTTT AAAAAAAAAA AAAAAAAAAA AAAGTACGTT ATGTTTTCAG ATAAGAACAC	180
TTCTTCATGG ATGACTTGAA ATAATTGCCA TGGTCCCTAA GTTTTCCTCT CTGTAGATGA	240
ATGATATAGC TCAGTATCTA AGCAGTGGAT CCTCGAG	277

(2) INFORMATION FOR SEQ ID NO:1505:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 341 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1505:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGCCTCCC AAGCTGCTGG TATTACAGGC	60
GTGAACCACT GCACCTGGCC TAATACGATA TTCTTACAAT TTAAAAATG AAAGCAGAGG	120
AATGGTGGCA GGGGAAGCTGA CATTTTAAGA GTTCACTTCC TTGTAGTTAT CACAGTTAAT	180
TCTTACTGTT AGAATAAGTG GTAAGTGGC AAGGTCACAT TGCTAGATGT CAGAGCAGAA	240
ATTAGAAATC AGGTCTAGCC AAGGCCATCA CACTTCTCAG AGCATTAACA ATTCAATTCA	300
GTTAGTGTTT ATTGAACACC TATTGTGTTT TGGCCCTCGA G	341

(2) INFORMATION FOR SEQ ID NO:1506:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 270 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1506:

GAATTCGGCC	TTCATGGCCT	AGGCATTTTG	TCTCTAGAAT	TACCCACCCG	TTCCTGCGCT	60
CTACGGTTCT	CCATGCCCCC	TCCAGTTTGG	GGGTCTAAAC	CGAACAGGAG	AGGTGCAGGG	120
GACCAGGAGG	TGTCCTGGCA	CAAAGTTTCG	GGGTCTCTCC	TGGCAAGGGG	TCCCAGGGCC	180
TGGAGCCCGA	GGCCAGCCA	AAAGCACACA	GCATCAAAAC	ATGTTTTTAG	TGGGAAGCTC	240
CAGGCCCTGC	CCCTCCCCGG	GGGCCTCGAG				270

(2) INFORMATION FOR SEQ ID NO:1507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1507:

GAATTCGGCC	TTCATGGCCT	AGAGCAGGAA	GATTGTGTGA	GTGCTGGGGT	TTGGGGGTGC	60
CCAAGTTGGG	AACCAGTGGG	GGGAGAGAGA	GGTAGGAGGT	AGATGGATGG	AGATCAAAGG	120
CCAGGCCGTG	GGCCAAGGGG	GCTGCTAACC	CTTCAACCTT	GTGTTAGCCT	GTACACTCAC	180
CAGGCCAGGC	TCAGCAGGCG	GGCTGTTTAC	CTCCTGGCAG	CAAATGGTCC	AGAATGTGCC	240
CTCGCTGCAG	CCCAGCTGGC	TCCAGAAGGG	GGACCACAGA	GGCTGGAGCT	ATGCATGCAC	300
AGTGCTTTCT	CCCAACCTTG	CTTCTGAGAA	AAGTGTCCCT	GCGAGGGGCC	TGGAGGAGGG	360
AGCTAGGGAC	CAGCAGAAGG	GCCTAGGTTT	CTGTAGCATC	ATTTTGTAGCC	CTGGCTGAAT	420
CTGGGAAGCA	CCTGGTGGCT	TTAACATTCC	CGTTAGCTCG	AG		462

(2) INFORMATION FOR SEQ ID NO:1508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 694 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1508:

GAATTCGGCC	TTCATGGCCT	AGTCACAATC	CACTTAAAGA	AGTTTGGTTA	TATTTCACTG	60
AAAATTTTCT	TCCAGAGTAG	GTTTTTTTTC	GTGGGTTGGG	GGGTAACCTT	ACTACAATTA	120
GTAAGTATGG	TGCAGAATTT	CATGCAAATG	AGGAGTGCCA	GCAGTGTGAT	AATTTAAACA	180
TATTTAAACA	AAAACAAAAA	AAATGAATGC	ACAAACTTGC	TGCTGCTTAG	ATCACTGCAG	240
CTTCTAGGAC	CCGGTTTCTT	TTACTGATTT	AAAAACAAAA	CAAAAAAA	TAAAAAAGTT	300
GTGCCTGAAA	TGAATCTTGT	TTTTTTTAT	AAGTAGCCGC	CTGGTTACTG	TGTCCTGTAA	360
AATACAGACA	CTTGACCCTT	GGTGTAGCTT	CTGTTCAACT	TTATATCACG	GGAAATGGATG	420
GGTCTGATTT	CTTGGCCCTC	TTCTTGAATT	GGCCATATAC	AGGGTCCCTG	GCCAGTGGAC	480
TGAAGGCTTT	GTCTAAGATG	ACAAGGGTCA	GCTCAGGGGA	TGTGGGGGAG	GGCGGTTTTA	540
TCTTCCCCCT	TGTCGTTTGA	GGTTTGTATC	TCTGGGTAAA	GAGGCCGTTT	ATCTTTGTAA	600
ACACGAAACA	TTTTTGCTTT	CTCAAGTTTT	CTGTTAATGG	CGAAAGAATG	GAAGCGAATA	660
AAGTTTTACT	GATTTTTGAG	ACACTAGACT	CGAG			694

(2) INFORMATION FOR SEQ ID NO:1509:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 490 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1509:

```
GAATTCGGCC TTCATGGCCT AATGAGGTTC TATCTAGAGG TGATGGGAGA CAGTGACAGA      60
TCATCAGGCA TTAGATTCTC ATAAGGACTG CGCAACCTAG ATCCCTTGAA TGAACAGTTC      120
ACAATAGGGT TCACTCTCCA ATGAGAATCT AATGCTGCCG CTGATCTGAC AGGTGCCAGA      180
GCTCAGGCGG TAATACGAGA GGCTGGAGAT ACAGATAAAG CTTCACTTGC TTGCCCCCCA      240
CTTACCTCCT CTGTGCGGCG CCAGTTCCTA ACAGGCCACA GACCGCTACC AGTCCATGGC      300
CTGGAAGTTG GGGACCCCTC TACTGGGATA TTTATAATTG CATATGTGGT TACCTAATAT      360
TTCCATGATA CAACACTGGT CTAGATTCTA GGCCATTCTC CTTCAAAAAG AACCTGCTT      420
CCTTACAGTT TTACTGTTTA GCAGCAATGT TTTCTACCCC TTCTTAAAT TTTAGCCAC      480
CACACTCGAG                                         490
```

(2) INFORMATION FOR SEQ ID NO:1510:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 313 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1510:

```
GAATTCGGCC TTCATGGCCT ACTCTCTCAT TCCTACCCTC CTCCCCTCCA CTCACGCTCC      60
TCCCAATCCC CAAGGTCCTC TCATTCCAC CTTCCTCCCT TCCTCTCCTC ACGCTCCTCC      120
CTATCCCCGA GCTCCTCTCT CATCCCTACC CTCCTCCCCT CCACTCACGC TCCTCCCAAT      180
CCCCAAGGTC CTCTCATTCC CACCTTCCTC CCTTCCTCTC CTCACGCTCC TCCCTATCCC      240
CGAGCTCCTC TCTCACTCCC TCCCTCCTCT CATGCTCCTC CCCCCTCTCC TCATGCTCCT      300
CCCCATCCTC GAG                                         313
```

(2) INFORMATION FOR SEQ ID NO:1511:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 354 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1511:

```
GCCGGGTGGG CCGGAGGTGG CGCGCCGCA CGGCTTTGTT CCGGAAAGCC CTTAGGTGGA      60
GAGCGATGTG GGGCGCGGCA GGGGGATCGC GTAGAGGAAC CTTGCGGCAC CGCCTCTCCG      120
GGTCTGGGAA TCTGCTGAAC TCCTTGCTCT TCTTGGGGTC CCTCGAACGC CCCAGCTAAG      180
AAGGGCGGGG GCCTTGCCAG GGCAGGAGCA ACATGACGTT CAAGGTCTTC CTGTGGCTTC      240
TGTAAGAAAA TGTTCACTG GAGCCCTGTC CACATGGGCT GTACTAAGGA TCTGGCACGA      300
GGAAGAAATA TCACTGCAGA ACCTGAAGCC CTCGGTTGGA AGGATCACCT CGAG      354
```

(2) INFORMATION FOR SEQ ID NO:1512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1512:

```

GAATTCGGCC AAAGAGGCCT AGAGCAGCTT GGCTAAAAGT AAGGGTGTCTG TGCTGATGGC      60
CCTGTGCGCA CTGACCCGCG CTCTGCGCTC TCTGAACCTG GCGCCCCCGA CCGTCGCCGC      120
CCCTGCCCGG AGTCTGTTCG CCGCCGCCCA GATGATGAAC AATGGCCTCC TCCAACAGCC      180
CTCTGCCTTG ATGTTGCTCC CCTGCCGCCG AGTTCCTACT TCTGTGGCCC TTAATGCCAA      240
CTTTGTGTCC TGGGAAGAGTC GTACCAAGTA CACCATTACA CCAGTGAAGA TGAGGAAGTC      300
TGGGGGCCGA GACCACACAG GTGGGAACAA GGACAGGGGG ATTTAAGCAG TCAAAAGGAA      360
AAACATGTTA AGACCCTAGA CTTGTATATT GACACACAGA ACTCGAG      407

```

(2) INFORMATION FOR SEQ ID NO:1513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1513:

```

GAATTCGGCC AAAGAGGCCT ACATTCATAC AATTACAGAA TTCAAATATT GCAAAAGGAT      60
GTGTGTCTTT CTCCCCGAGC TCCCCTGTTT CCCTTCATTG AAAACCCACCA CCGTGCCATC      120
TCTTGTGTAT GCAGGGCTAT GCACCTGCAG GCACGTGTGT ATGCACTCCC CGCTTGTGTT      180
TACACAAGCT GTGGGGTGTT ACGCATGCCT GCTTTTTTCA CTTAATAATA CAGCTTGGAG      240
AGATTTTGTG ATCACATTAT AAATCCCACT CGCTCTTTT GATGGCCACA TAATACTAC      300
TGCATAATAT GGATACGCCT TATTTGATTT AACTAGTTCC CTAATGATGG -ACTTTTAAGT      360
TGTTTCCTTT TTTTCTTTT TTTGCTACTG CAAACGATGC TATCTAGGCC TCTTTGGCCC      420
AA

```

(2) INFORMATION FOR SEQ ID NO:1514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1514:

```

GAATTCGGCC AAAGAGGCCT ATGGAAATTC AAGACCTGAT GTTTGAGGAG ATGAGGGAAA      60
CTCTTAAAAA TGACCTAAAA GCAGTTTATG GAGGAAAAGC TACAATACCT GAGGTAAGAA      120
ATTCAGAGAA CTCCAGTAGT AGGACAGAGT TTCAGCAAAT AATCAATTTA GCATTACAAA      180
AAACAGGGAT GGTAGGGAAA ATAGAAGGAG AAAACTCTAA AATAGGTGAT GATAATGAAA      240
ATTTAACCTT TAAATTAGAA GTAAATGAGC TGAGTGGTAA ATTAGACAAC ACTAACGAAT      300
ACAATAGTAA TGATGGTAAG AAATTACCCC AGGGTGAATC ACGAAGTTAC GAAGTCATGG      360
GAAGTATGGA AGAAACCTTA TGCAATATAG ATGACAGAGA TGGAAATCGC AATGTCCATT      420
TAGAATTTAC AGAAAGAGAG AGTAGGAAGG ATGGAGAGGA TGAATTTGTC AAAGAAAAAC      480

```

TCGAG

485

(2) INFORMATION FOR SEQ ID NO:1515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1515:

```

GAATTCGGCC AAAGAGGCCT AGGCACAGAA GGGTGGTGAG TGTGATCAAA TCTAGTCTCA    60
CTCCCACTTT TTAGTCTCAC TCCTACTTTT GTCCACCACC CAGGCACGGA GAGAAAGGAA    120
TGTTTAGCAC AAGACACAGC GGAGCTCGGG ATTGGCTAAA CTCCCATAGT ATTTATGGTG    180
GCCGCCGGCG GGGGCCCCAG CCCAGCTTGC AGGCCACCTC TAGCTTTCTT CCTACCCCAT    240
TCCCGGCTTC CCTCCTCCTC CCCTGCAGCC TGGTTAGGTG GATACCTGCC CTGACATGTG    300
AGGCAAGCTA AGGCCTGGAG GGTGAGATGG GAGACCAGGT CCCAAGGGAG CAAGACCTCG    360
CGAAGCGCAG CAGCCCCGGC CCTAGGCCTC TTTGGCCGAA    400

```

(2) INFORMATION FOR SEQ ID NO:1516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1516:

```

GAATTCGGCG CCGCGTCGAC GTCGACGCGG CCGCGAATTC GGCCAAAGAG GCCTACCCAT    60
GTCAATCAAG ATGGGTGATT ATGAAATGCC AGACTTCTAA AATAAATGTT TTGGAATTCA    120
ATGGGTAAAT AAATGCTGGC TCGAG                                145

```

(2) INFORMATION FOR SEQ ID NO:1517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1517:

```

GCTGGACCTC CTGTGCAAGA ACATGAAACA GCTGTGGTTC TTCCTTCTCC TGGTGGCAGC    60
TCCCAGATCG GTTCTGTCCC AGGTGCAGCT GCGGGAGTCG GGCCAGGAC TGGTGAAGCC    120
TTCGGAGACC CTGTCCCTCA CCTGCACTGT CTCTGGTACT TCCGTCAGAA GTGTIAGTTA    180
CGACTGGAGT TGGCTCCGGC AGTCCCCGGG GAAGGGACTG GAGTGGCTTG GAGAGATTGA    240
TTACAGGGGG AGAGGCAATT ACAACCCGTC CCTCGAG                                277

```

(2) INFORMATION FOR SEQ ID NO:1518:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 161 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1518:

GAATTCGGCC AAAGAGGCCT ACTCATGCAC CTAATTGGAT CCTATCTTTG TGTGTTAGC	60
TGGTTATTAT GCAGACTTTA TTATGTGGTT GTTTTATAGT GTCCATAACC TATGTACTTA	120
AGTTTGTTTT TGTGGTGGCG CTCCAATTA GGGCTCTCGA G	161

(2) INFORMATION FOR SEQ ID NO:1519:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 561 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1519:

GAATTCGGCC TTCATGGCCT AATATAAAC AATGTTTTTC AAGGCATTAT ATAATAGGCT	60
AAGGACAGTG ACCTCCAAGA GACAGCAAAC AAGGTAATAC CTGTGACTGC TCCAGCTTAC	120
TGCCTTGAGA GAATTAATAG TAGGTTTGTG GTACAGGGAG GGAGAATCCA GTCAGAGCCC	180
AGCGGACTTG CTGAATTAAG GAAATGGAGC TGAGAGTCCA GAGAGACCAA CATGGCTAAA	240
GTTGTCATGA CAGAGCACTC AGAAGTAGAG AGCTGCACAG CAACATAACC TAAGAGCTCT	300
GAAGATAATC TCCCTCAAAT ACTCAGCTGA GTAAGTATCA ACATATATGT GTGAGGAAGC	360
TATCTGAGGC TGACAAAGAA CTGCCTGAAG AGATTAGAGG GAACAGTACT TGGCACTCAC	420
ACAGAATTGG AACTGTACC TGTCCCACC AGCCAACTG GAAAAACCTC AGGATTCATG	480
GGGTACTCAG AAAGGACTTG CATCAGGTAT GGGGAATAAT TAGCCCTAGA CAGAGCACTG	540
CTCTAATCCC ATCCAATCGA G	561

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145,

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or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ

ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235,

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109,

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or to a complement of said sequence.

5. An isolated protein encoded by an isolated polynucleotide of claim 1.
6. An isolated protein encoded by an isolated polynucleotide of claim 2.
7. An isolated protein encoded by an isolated polynucleotide of claim 3.
8. An isolated protein encoded by an isolated polynucleotide of claim 4.